IDENTIFICATION OF READINESS FACTORS IN COMMUNITY COLLEGE GRANT DEVELOPMENT OPERATIONS: A NATIONAL PERSPECTIVE

By

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To my parents, Robert E. and June Withers Williams (deceased),
who believed in the potential of their little girl
by providing everlasting love and support in all her endeavors.

To my late stepmother and friend, Rosemary Leonard Williams,
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The purpose of this study was to identify model factors within a system framework that indicate readiness for success in raising external funds through grant procurement in America's community colleges. This study determined whether differences existed among grant-generated revenue and explanatory variables related to the college and grant office operation.

The sample population for this study included 362 public community colleges that were members in the Council of Resource Development between 1998 and 2001 and whose president or chief development officer responded to the survey. For purposes of this study, the community colleges were categorized into one of three self-identified geographic locations: rural, suburban, or urban. A 60-item survey instrument was initially mailed to each college in July 2000. A multiple regression analysis test was conducted to determine the relationship among the selected variables. The variables

selected were grant office operating budget, years of experience and tenure of the chief development officer, roles of the college president and chief development officer, evaluation factors of total dollars awarded and meeting institutional goals, geographic location, and college size as measured by unduplicated credit headcount enrollment.

This research based on relevant literature was the first national study conducted on the operations of a grants office in the community college environment. It is possible to conclude from this study that readiness to engage in grants development is having sufficient enrollment of credit students, being located in an urban area and having a chief development officer with enough tenure to know the college system and community. The findings of this national study are generalizable to the population as they indicate a statistically significant relationship with the amount of grants revenue awarded and the three significant factors.

As development professionals, presidents, and trustees review the survey data, they must consider that resource development expenditures are not simply administrative expenses but rather investments in one of the few revenue centers at a college. Community college resource development efforts can yield increased grant funding for the continued transformation of community colleges if these significant system factors are considered.

CHAPTER 1
DESCRIPTION OF THE STUDY

Introduction

Since the birth of community colleges, resource development efforts have provided support for academic programs, scholarships, and personnel. At first, these efforts only needed the attention of the college president. However, as bulging student enrollments created increased needs for financial assistance and programs, formalized college foundations came into existence to help raise necessary funds. Sadly, these efforts have been perceived as peripheral functions whose total impact on the college and its programs have not been realized (Blong & Bennett, 1991; Cain, 1999; Glass & Jackson, 1998a; Kelly, 1998). In the last decades of declining core state and local tax support, public community colleges have relied more on external revenue to provide basic operations (Glass & Jackson, 1998a; Merisotis & Wolanin, 2000; Phillippe & Eblinger, 1998; Roueche & Roueche, 2000). Now, the earlier predictions for increased systematic fundraising in community colleges have been realized due to tighter public resources and by a new wave of energy and optimism about what community colleges can accomplish (Duronio & Loessin, 1991b).

Substantial literature exists on numerous methods for raising private funds, mostly focused on private colleges and large universities (Clements, 1990; Phillippe & Eblinger, 1998). The formal university elements of capacity, effort, and history do not reflect or support the characteristics of "people's colleges" (Brittingham & Pezzullo,

1990; Clements, 1990; Duronio & Loessin, 1991b; Glass & Jackson, 1998a; Phillippe & Eblinger, 1998; Robertson, 1981). Studies comparing resource development programs across institutional types have linked success to capacity (number and wealth of alumni), history (age of operation), and effort (institutional commitment and resources) (Brittingham & Pezzullo, 1990). The private college success factors are not intrinsic or descriptive of community colleges that lack traditional alumni activities, have limited experience, operate with part-time development staffs, and obtain meager financial support (Smith, 1993).

There are no definitive success factors identified for a community college grants resource development environment, although a myriad of variables have been analyzed. Many times success has been defined as total revenue generated per full time student. Key studies in the last four decades have identified many characteristics and indicators of success in resource development efforts in private and public two-year colleges (Bremer, 1965; Clements, 1990; Degerstedt, 1982; Duffy, 1979; Glandon, 1987; Hagerman, 1978; Ironfield, 1991; Jackson, 1997; Jenner, 1987; Luck, 1974; MacRoy, 1970; Maples, 1980; McCain, 1974; Pickett, 1977; Silvera, 1974; Sims, 1973; Toll, 1966). However, these studies focused attention on the fundraising techniques and activities of a foundation office rather than a comprehensive grants operation. Since no definitive set of factors seems to be related to success, Clements (1990) suggested this financial success could be purely from happenstance and not from a set of characteristics that directly contribute to the success of fund-raising effort.

Of these early studies, only a few mentioned the efforts and impact of the grants operation in procuring significant funds (Clements, 1990; Hagerman, 1978; Ironfield,

1991; Maples, 1980; McCain, 1974; Robertson, 1981). McCain (1974) discovered nearly half of the institutions in his study included federal and state grants in the development operation and were more successful in the area of public grants than private fund-raising. Maples (1980) included federal, state, and private sources in a study to determine key factors associated with external funding. Robertson (1981) discussed the special problems and opportunities of community colleges in making a case for fund-raising, citing various adaptations to the traditional university systems, and as a result of habit or actual success, community colleges adopted versions of the private four-year model of fund-raising. However, over time due to the unique mission of the "people's colleges," community colleges discovered they lacked the nexus of a formal infrastructure of strong alumni support, million dollar endowments, and large staffs to be successful.

The limited experience of community colleges in development partially explained the dearth of research into the activities (Jenkins & Glass, 1999). An annual report, the Voluntary Support of Education (VSE), conducted by the Council for the Aid to Education (CAE) gathers data on foundation activity in higher education. In 1998, only 75 of over 1,100 public two-year colleges completed the survey (CAE, 1998), and again in 2000 only 84 community colleges were represented (CAE, 2000). The limited data and findings from these national survey's and research studies provided only estimates of development activity, but little or no detail about the total development operation (Phillippe & Eblinger, 1998).

A resource development activity is directly related to the institution's entire process of securing external funds (Glass & Jackson, 1998a). The value-added benefit of a resource development function has been undervalued and underutilized in public

community colleges. Only within the last two decades when state funding decreased, when demands for more financial aid increased, as enrollment of adult students increased, and performance funding became a reality did administrators turn their attention to the special talents of resource development professionals (Jackson, 1997)

Although private funding is as old as the junior college movement (Witt, Wattenbarger, Gollattscheck, & Suppiger, 1994), the grants and competitive contract operation, a strong newcomer within the last 20 years, is the fastest growing revenue category within the community college structure—rising tenfold between 1980 and 1996 (Merisotis & Wolanin, 2000). The scarcity of public support is reflected in the continued opening of new grants offices; however, Kelly (1998) suggested the increase in "stand alone" offices since the 1990s may be caused by grant operations being decentralized from other college functions.

The role of the chief development officer was studied by Worth and Asp (1994), who developed the Vector paradigm to identify the roles and characteristics of resource development officers in four year institutions. Once they identified specific tasks and areas of responsibility, the resulting characteristics were used to delineate factors of success for these individuals and in their procurement of external funds. Worth and Asp (1994), using their Four Role model and Vector paradigm, studied the professional experience of university development staff and their roles and responsibilities. Some of the findings of this study can be applied to the grants operation and staff to determine effectiveness, and can assist in staff selection, appropriate professional development, evaluation of performance, and return on investment.

Purpose of the Study

The purpose of this study was to identify factors that indicate readiness for success to enable community colleges to engage successfully in resource development activities. The application of a systems theory approach allowed a holistic view of the relationships among the outcome variable of grant-generated revenue and the explanatory variables of grants operating budget, college size as measured in unduplicated head-count enrollment, geographic location, the chief development officer's years of experience and institutional tenure, roles of the president and chief development officer, and evaluation factors of meeting institutional goals and total dollars awarded. The following research questions were raised.

1. What is the relation between grant revenue raised and the **grant office operating budget** when controlling for the other explanatory variables of interest in the proposed regression model?

2. What is the relation between grant revenue raised and the **critical role of the college president** when controlling for the other explanatory variables of interest in the proposed regression model?

3. What is the relation between grant revenue raised and the **critical role of the chief development officer** when controlling for the other explanatory variables of interest in the proposed regression model?

4. What is the relation between grant revenue raised and the **years of tenure of the chief development officer at the institution** when controlling for the other explanatory variables of interest in the proposed regression model?

5. What is the relation between grant revenue raised and the **years of experience of the chief development officer** when controlling for the other explanatory variables of interest in the proposed regression model?

6. What is the relation between grant revenue raised and the **evaluation factor of meeting institutional goals** when controlling for the other explanatory variables of interest in the proposed regression model?

7. What is the relation between grant revenue raised and the **evaluation factor of total dollars awarded** when controlling for the other explanatory variables of interest in the proposed regression model?

8. What is the relation between grant revenue raised and the **geographic location of the college** when controlling for the other explanatory variables of interest in the proposed regression model?

9. What is the relation between grant revenue raised and the **college size as unduplicated credit head count** when controlling for the other explanatory variables of interest in the proposed regression model?

Delimitations and Limitations of the Study

Delimitations

The following items were the delimitations of this study.

1. The study was limited to the community colleges that were members of the Council for Resource Development.

2. Only colleges that self-identified as maintaining a resource development operation were included in the analysis.

3. The correct information that was obtained from the survey as completed by the resource development officer or designate at each institution.

4. The correct use of quantitative measures in the analyses of the survey data.

5. Survey respondents self-identified the geographic location of their institution from prior experience and knowledge.

Limitations

The following items were limitation of this study.

1. The results of this study may be generalized only to community colleges with similar scope and purpose, and that maintain a resource development operation.

2. Information and data were dependent on the accuracy of the fiscal data provided by the college representation on the survey instrument.

3. Data accuracy obtained through the survey instrument was based on the knowledge, integrity, and perceptions made by the individuals at the colleges.

4. Data were analyzed based on the return rate of responses received.

5. Data were based on a one-year period of time, fiscal year 1998-1999; however, long-term effects may influence the findings.

Significance of the Study

Sophisticated grants development in community colleges is a recent event (Clements, 1990). The last two decades of declining core state and local tax support have forced public community colleges to look elsewhere for additional revenue to provide basic operations (Glass & Jackson, 1998a; Honeyman, Wattenbarger, & Westbrook, 1996; Merisotis & Wolanin, 2000; Phillippe & Eblinger, 1998; Roueche & Roueche, 2000). Foundations have been established in many community colleges but are woefully ineffective when compared to university and private operations as illustrated by garnering less than 1% of the total dollars given to education in 2000 (Craft & Guy, 2002). Earlier predictions of increased fundraising have been realized due to decreased public resources, as a new optimism exists about what community colleges can accomplish (Duronio & Loessin, 1991b).

The literature was vast on which college characteristics were best for private fund-raising. The literature mostly related to private colleges and large universities, which have long histories and well-established offices of institutional advancement (Clements, 1990; Degerstedt, 1982; Duffy, 1979; Ironfield, 1991; Koelkebeck, 1994; Luck, 1974; Pickett, 1977). These studies focused attention on the "nuts and bolts" of fundraising techniques and activities of the foundation office only, not acknowledging that resource development is part of total college system approach to fulfilling the mission and needs of the institution (Blong & Bennett, 1991; Clements, 1990; Hagerman, 1978; Ironfield, 1991; Keener, 1982; Pray, 1981). Of these early studies, only a few

mentioned the efforts and impact of the grants operation in procuring significant funds (Clements, 1990; Hagerman, 1978; Ironfield, 1991; Maples, 1980; McCain, 1974; Robertson, 1981). Thus far, a set of success factors for resource development that specifically fit the community college environment have not been decided.

Thus, colleges continue to adopt the university model of advancement, which does not support the uniqueness of the community college mission (Brittingham & Pezzullo, 1990; Cain, 1999; Clements, 1990; Duronio & Loessin, 1991b; Glass & Jackson, 1998a; Phillippe & Eblinger, 1998; Robertson, 1981). This study was designed to contribute to the understanding of the variables within a community college system that ready the institution to be successful in a grant procurement operation.

The variables for this study were selected by a review of relevant literature, linked to the systems theory, and statistically analyzed to identify factors of readiness for success in the grants procurement operation. The systems theory was applied to the community college resource development operation particularly focused on the grant operation as it relates to and is supported by the administration through adequate resources and integrated structures. This researcher compared data on selected variables to determine whether relationships exist between factors that may ready a community college to be successful as it engages in grant development. This study is appropriate and timely because of the growing emphasis on securing new funding to support the community college needs and mission, the recognized value of development in strategic planning, and the invaluable benefits reaped from development effort relationships.

The identification of success readiness factors may aid college administrators, trustees, and development professionals in meeting institutional goals, selecting staff,

establishing budgets, and developing a total system that supports the growth and direction of the college. Implications from this research may support strategic and financial planning by boards and presidents as they assess their college readiness to establish the grant procurement operation as an integral component of their college. As an integrated function within the college, the resource development efforts are an investment in one of the few revenue generating centers at a college (Boardman, 1993; Glass & Jackson, 1998a, 1998b; Keener, 1982).

Definition of Terms

The terminology in this study was used in accordance with the following definitions.

Chief development officer is the person charged with leading the external funding efforts of an institution and may include the titles of vice president, associate vice president, executive director, director, or dean.

Development refers to a process that includes the identification of institutional needs and priorities, and is synonymous with fundraising (Worth, 1993).

External funding is cash awards or property secured through the grants procurement functions to further the mission and programs of the college.

Fundraising refers to programs and activities involving the solicitation of gifts to the institution, generally synonymous with development (Worth, 1993).

Institutional advancement refers to units of the college linked in the pursuit of external funds from grant procurement, competitive contracts, foundation operations, and alumni activities.

Institutional readiness refers to conditions existing in the college, which create a receptive or nonreceptive environment for change that impact the institutions ability to support planning, development, and implementation of grant procurement strategies.

Mission statement is a college document that defines the institutions purpose and reason for existence.

Open system assumes an organization is not independent of its external environments and has an impact on and is affected by its environment (Russo, 1991) or the energy needed to maintain a dynamic steady state in a system (Laszlo, 1996).

Proposal is a formal, written solicitation for a gift or grant (Worth, 1993).

Public community college refers to a two-year degree-granting institution supported by public funds and tuition that offers courses paralleling the first two years of a baccalaureate degree and occupational entry education (Cohen & Brawer, 1996).

Resource development is a function to seek external funds to advance financially the institution in support of its mission and identified needs through the application of grantsmanship and fundraising techniques.

Rural denotes a place of less than 2,500 inhabitants (Department of Commerce, 2002).

Suburban refers to a place with a population of 2,500 living outside of urbanized areas (Department of Commerce, 2002).

Tenure refers to the length of time (tenure) the chief development officer has been at the institution.

Unduplicated credit head count is the number of credit hour enrollment during an academic year, totaled by individual student.

Urban is a place having a central city surrounded by a densely settled area with a population of 50,000 or more and exceeds 1,000 people per square mile (Department of Commerce, 2002).

Overview of the Methodology

A review of the relevant literature pertaining to fundraising in educational institutions in the United States regardless of type or size was initiated. Data were collected by means of a survey mailed to public, two-year community colleges that were members of the Council for Resource Development (CRD) or American Association of Community Colleges (AACC). Community colleges identified their geographic locations as either rural, suburban, or rural. A multiple regression test was used to determine the relationship among the outcome and explanatory variables.

Population

The survey was mailed to 968 public two-year community colleges in the United States and territories that were members of the Council for Resource Development (CRD) or American Association of Community Colleges (AACC) at that time (Phillippe & Patton, 2000). A total of 380 (39%) surveys were returned representing 45 states, 1 U.S. territory, and the 10 CRD regions. For this study, only colleges in the U.S. and territories that were members one or more years between 1998-2001 in CRD were selected as the sample population. An extensive review of CRD memberships between 1998-2001 resulted in a membership average of 650 public, two-year community colleges, of which 362 (95%) were usable for this study. Private, two-year colleges, tribal or colleges in foreign countries although CRD members, were not part of this study.

Data Collection

The data for this study were derived from a survey developed by a University of Florida research team in the Institute of Higher Education, of which this researcher was a member. The survey was based upon the team's knowledge and experience in the area of resource development and understanding of community colleges. A thorough research of the literature was used as a basis to formulate the survey questions most appropriate for the community college setting. The research team enlisted the assistance of resource development professionals in Spring 2000 to refine and test the 60-item instrument (Appendix A). In July 2000, the survey (Appendix D) was sent to the college president and the chief development officer with directions that requested them to direct the survey to another appropriate individual in one of the respective operations. Upon receipt of the surveys, the university research team assigned a code to each for anonymity, and the survey responses were entered into a database utilizing Microsoft Excel software. The survey was supported by CRD, the Clements Group, and Association of Community College Trustees. As a member of the research team, this researcher was allowed access to the survey data for this study.

Data Analysis

The variables were chosen based on a review of relevant literature. The variables selected for analysis included the total grant revenue, the grant office operating budget, the chief development officer's years of experience and institutional tenure, critical evaluation factors of meeting institutional goals and total dollars awarded, critical roles of the president and chief development officer, college size as measured in unduplicated credit head count enrollment, and geographic location. Nine research questions were developed

for the selected explanatory variables. Descriptive and inferential statistics were conducted on the 362 eligible respondents. A linear multiple regression model was selected to test the variables because the explanatory variables were continuous, and it was not known if one variable was more important than another. A computer with the SPSS 10.1 software system analyzed the data from the 362 eligible colleges. A significance level of 0.05 was selected. Descriptive statistics of frequency counts, central tendency (mean), percentages, and standard deviation were obtained on the target population, followed by inferential statistics from a linear regression analysis which included the regression equation, standard error, semi-partial correlations, standardized coefficients, unstandardized coefficients, the regression and residual sums of squares, and the F ratios.

The research hypothesis for the linear multiple regression model results in statistically significant and positive relations in the explanatory variables with effect on the outcome variable. A formula for the linear regression model was developed and included each variable. The regression formula model is as follows:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_8 + \beta_9X_9 + \varepsilon$$

Organization of the Study

Chapter 1 includes the introduction, purpose of the study, a broad overview of the study, delimitations and limitations of the study, definition of terms, and an overview of the methodology. Chapter 2 contains the results from the review of relevant literature. It is divided into four sections and discusses the following topics: background of resource development in higher education, systems theory as it relates to supporting an integrated development structure, review of selected variables supported in the literature, and a summary. Chapter 3 describes the procedures and methodology including the research

questions, population and sample, data collection, and data analysis. Chapter 4 reports the results of the data analysis from the test of the multiple regression model. Chapter 5 discusses the principal findings of the research, conclusions, implications, and recommendations for further research.

CHAPTER 2
REVIEW OF RELATED LITERATURE

The following review of the literature is presented in three sections. The first section is an overview of the literature regarding the history and purpose of resource development in higher education institutions, especially community colleges. The second section is a discussion of systems theory and its implications to the resource development operation. The third reviews the selected variables of this study, which may be indicators of institutional readiness to engage in grant procurement.

The variables chosen for discussion were based on the relevant literature of fund-raising and resource development in higher education and are supported by findings in previous studies that identified success elements (resources, organizational structure, location, size, revenue, experience, role of president) found more frequently in productive resource development operations (Duffy, 1979; Hagerman, 1978; Hunter, 1987; Ironfield, 1991; Keener, 1982; Koelkebeck, 1994; Pickett, 1977). The selected variables focused on the relationship among the outcome variable of total grant-generated revenue and each of the explanatory variables of the grant office operating budget, experience and tenure of the chief development officer, the roles of the college president and chief development officer, evaluation measures of total dollars awarded and meeting institutional goals, the college size defined as unduplicated head count, and geographic location.

Resource Development in Higher Education

With past experience and future trends in state support, international competition, and demographic changes, it is imperative community colleges realize that resource development, through private or public sectors, is an important element in meeting the programmatic and operational needs of the college. More than ever before, there are unparalleled possibilities for a better quality of life than has ever existed, if those threats to our way of life can be nullified (Gleazer, 1994). College leaders in concert with their development team can use the economic and political realities to stimulate supplemental income from external sources for direct service to current students, which then can generate additional income by attracting new students (Bock & Sullins, 1987; Brumbach & Bumphus, 1993). However, to meet these many needs, a system-integrating strategic plan with fund development at its core must exist that empowers everyone in the college community to make significant contributions to the organization's financial health (Blong & Bennett, 1991; Cain, 1999; Hagerman, 1978; Ironfield, 1991; Jackson, 1997).

The purpose of resource development is to utilize all the internal and external resources for the accomplishment and promotion of the college mission, goals, and programs by providing the institution with additional financial means to create and expand programs not possible without external funds (Wattenbarger, 1982). Components of the community college resource development function include grants from federal, state, local and private sources, competitive contracts, private gifts and planned giving, and fund-raising events.

History

A review of higher education history reveals a close relationship between the establishment of its institutions and the development of external funding in response to declining financial support (Cohen & Brawer, 1996; Duffy, 1982; Ironfield, 1991; Jackson & Glass, 2000; Kelly, 1998; Pickett, 1977; Wattenbarger, 1982). In the 20th century, community colleges were supported by a delicate balance from three major sources of funds: local and state taxes, grants and gifts, and tuition, varying in proportion state by state (Honeyman & Bruhn, 1996). Since the 1960s, colleges have experienced dramatic enrollment increases, passage of anti-tax legislation, increased competition for public funds, and national tragedies, all of which have impacted negatively on the college operating budgets. Reports have revealed the gradual decline of tax revenues since the late 1970s and the increase in federal categorical and competitive grant funding; thus, revenue from grants and private donations have become alternative choices for providing funds to survive tough times and to help build a strong financial base (Blong & Bennett, 1991; Bock & Sullins, 1987; Brittingham & Pezzullo, 1990; Clements, 1990; Degerstedt, 1982; Duffy, 1982; Duronio & Loessin, 1991b; Hagerman, 1978; Honeyman, Wattenbarger, & Westbrook, 1996; Keener, 1982; Koelkebeck, 1994; Luck & Tolle, 1978; Mitzler, 1988; Robertson, 1982; Robison, 1982; Wattenbarger, 1982). As late as 1990, there was no urgency to raise money since state and local funding helped to build facilities and keep tuition low. However, economic downturns have confirmed the reality that future public money will be scarce and unpredictable (Craft & Guy, 2002).

Echoes of grave predictions in declining federal and state funding continue to plague colleges today. It is unrealistic to depend on state appropriations to provide

sufficient funds for innovation and excellence in higher education (Blong & Bennett, 1991). From the initial fund-raising efforts in the community colleges, the term "resource development" has become a different, yet similar, concept to advancing the community college institutional mission from that practiced by university and liberal arts college peers (Clements, 1990; Koelkebeck, 1994; Worth & Asp, 1994). Community colleges established resource development activities to obtain government, private, and community support in the form of federal grants and private donations with less emphasis on planned giving and alumni activities as conducted by their university sisters (Clements, 1990; Smith, 1993). Brumbach and Bumphus (1993) stated there are only two reasons to pursue external funding: to accomplish short- and long-term goals more quickly and to provide enhanced capacity to serve the needs of the college community.

The demands on finite financial resources have forced reexamination of college missions and programs and turned community college efforts to federal grants and private foundations as sources of funds, thus reemphasizing the importance of resource development to support general fund activities (Duffy, 1982; Keener, 1982; Sharron, 1982; Wattenbarger, 1982). Once perceived as being a "second-class" college function (Blong & Bennett, 1991, p. 32), resource development in its infancy was seen as a peripheral function to the teaching mission and not an essential element at the heart of the institution (Daniel, 1985; Ironfield, 1991). External funding in the community college has become a hybrid activity that merges grants writing and donor relations expertise with strategic planning, instruction, programs, and advocacy (Brumbach, 1993). Brumbach (1993) stated there are four parameters required before a college can take full advantage of the available public and private funding: (a) premises of impact, integration, and

excellence; (b) structures of governance which embrace development as a partner; (c) operations of management, collaboration, and teaming; and (d) resources of presidential support, staff, and capacity. The securing of external funds for programmatic needs should be based on college objectives with efforts made to integrate, not adjunct, the new services or programs into the college (Brumbach & Bumphus, 1993).

Literature is scant relating to the specific grant and contract functions in the community college, although the broad issues of resource development have been widely discussed and studied (Brumbach, 1991, 1993; Hagerman, 1978; Keener, 1982; Loessin & Duronio, 1993; Smith, 1993). Since resource development incorporates the entire process of procuring external funding, this researcher applied all available research on resource development functions, processes, and personnel to this study of the grants operation. Traditionally, offices for institutional advancement in universities and liberal arts colleges have consisted of two distinct programs: an office for sponsored research dealing with grants and contracts and an office for development with foci on planned giving and alumni interests. Most coordinated and centralized development activity is approximately 50 years old and shares common characteristics of fund-raising success (Brittingham & Pezzulo, 1990).

As the community college graduates began to increase and private fund-raising opportunities expanded, colleges adapted aspects of the four-year university fund-raising model. Clements (1990) in using the Pickett (1977) model found that four-year fund-raising techniques could not be applied to two-year institutions. As a result, a newly redefined community college resource development model emerged that combined external fund-raising programs and established not-for-profit foundations (Keener, 1982). This new

model required a clear understanding of the roles of each program within the college functions. The key elements of this new model are the integration of institutional external resources in support of and directly relating to the institutions leadership and mission, and the active participation of the resource development functions in the strategic planning process (Duffy, 1979; Keener, 1982; Jenner, 1987; Wattenbarger, 1982). However, one must not forget the key to fund-raising is relationship building (Kelly, 1998).

With the passage of the Higher Education Act in 1965 and the 1968 amendments, funding opportunities became abundant, and community colleges entered into a competitive arena, giving them expanded opportunities to receive federal grants and contracts for programmatic and systemic projects. Today, private fund-raising continues to have limited participation and success, perhaps due to arguments about unhealthy competition with financially strapped private institutions, or perceived reductions in state allocations due to increased private support or institutional identity and connections (Blong & Bennett, 1991; Bock & Sullins, 1987; Brittingham & Pelluzzo, 1990; Keener, 1982; Koelkebeck, 1994; Smith, 1993). Smith (1993) cited three reasons why community colleges lag behind their four-year sisters: image and identity, constituencies and connections, and organizing and investing. Daniel (1985) proposed that resource development, institutional research, strategic planning, and data-base management must make up the whole system. However, Ironfield (1991) suggested the lack of a system approach might be a reason the majority of public two-year community colleges have not reached a comparable level of external support as their private and four-year sisters. The limited data on the performance of community college fund-raising is incomplete; thus, it

is difficult to determine the extent grants and foundations are realizing their potential as a revenue-enhancing asset (Craft & Guy, 2002).

In many colleges, the presidents and trustees are not aware of the potential benefits from development initiatives or what is required for success (Smith, 1993). Although it has been suggested community colleges lack the influences necessary for significant fund-raising, the experience of some colleges has revealed a well-organized development effort, grounded in the mission of the college, can significantly enhance the college culture and programs (Smith, 1993). Legislators should not interpret the solicitation of external funds by community colleges as a way to relieve the states of their fundamental responsibility to educate the citizenry (Bock & Sullins, 1987). If colleges desire to meet high standards of excellence, there are ways college leaders can incorporate systematic and comprehensive development efforts into a team approach to achieve excellence (Bock & Sullins, 1987; Clements, 1990).

Systems Theory

This study was designed to identify variables within a community college system that signal the readiness of the institution to engage in and be successful with a grant procurement effort. This research used a systems theory framework to understand the relation between the college system and the readiness variables for fund-raising. The application of a system theory framework implies the variables within the development function interact with the college, thus impacting the amount of funds raised. A college system exists in a total environment and, for this study, was viewed as an open system with the development function as an open subsystem within the larger college system. For this study, select variables of interest are studied within an educational system to

determine the readiness of a college to engage in fund-raising through grants procurement.

Defining a System

A system is a set of units interconnected that, when change occurs in either the elements or relations, produces changes in other parts of the system resulting in the entire system exhibiting properties and behaviors different from the individual parts (Jervis, 1999). Complex systems are inherently uncontrollable, and the traditional tools of management, prediction and control, are impossible to apply (Wheatley, 1999). A system is a nonlinear relationship of integrated and interdependent wholes the outcomes of which cannot be understood by adding together the isolated causal relationships (Jervis, 1999; Laszlo, 1996). Senge reported the nature of nonlinear models encourage experimentation and observation of changes "in order to learn about the system's critical points and its homeostasis" (Wheatley, 1992, p. 110). In the midst of change, order is maintained because each system part has autonomy, creating a "global stability" (p. 146).

System thinking provides a holistic perspective for viewing the world (Cain, 1999; Laszlo, 1996) and requires collaboration, participation, and openness to information and relationships (Wheatley, 1999). A system is driven by the behavior of the individual units who are moved by their incentives, goals, and calculations (Cain, 1999; Jervis, 1999) and who believe the power flows from ideas, not people (Senge, 1998). A systems approach can explain how individual variables following simple and uncoordinated strategies produce combined behavior that is complex and ordered, but not necessarily predictable or stable (Jervis, 1999). A self-organizing system has freedom to evolve and grow, following only the rule it must remain consistent with itself and its past

(Wheatley, 1992). As such, an educational system can be viewed as a set of interacting parts engaged in generating a product or achieving an objective. Finding solutions to system-wide issues requires the intelligence and experience that is located throughout the entire system (Wheatley, 1999). Educational institutions are open systems operating not in isolation, but as dependent entities upon and within the environment and other systems.

Contemporary systems science identifies strands of organized complexity in individuals, societies, and environments. The sciences concentrate on the organization as a set of structured events and how they function in time and space (Laszlo, 1996). The focus must be on developing processes and relationships to support the people coming together to develop solutions to identified issues (Wheatley, 1999). Systems are seen as wholes with real properties grounded in real-world reality and are classified as natural, organic, or inorganic (Cain, 1999; Jervis, 1999; Laszlo, 1996). Nature is an example of a giant "Gaia" system, a biosphere, which maintains itself through a specific structure of relationships among its parts, and manifesting irreducible characteristics of its own (Laszlo, 1996, p. 10). Systems detect relationships and situations, as they appear in the physical, biological, and social worlds, and these relationships give evidence to the dominance and power of the dynamics of the systems display (Jervis, 1999; Laszlo, 1996). Critical to a systems approach is the belief that structures are powerful, and the placement of the internal variables is an important element. The resulting behavior is determined by the structure and the position of the components (Jervis, 1999). A mission-based system requires everyone to think continuously to clarify purpose and principles in order to become a self-organizing sustainable system (Senge, 1998). System leaders have

discovered that human energy and creativity are limitless. Organizations that learn to work together, learn together, and trust one another develop the capacity to deal with the unknown and respond quickly and intelligently regardless of the event (Wheatley, 1999).

System Effect

The attributes of emergent properties and interconnections define all systems, and the results of the interconnections lead to a better understanding of how a system works (Pascale, Millemann, & Gioja, 2000). This holistic view of systems contrasts sharply with the mechanistic view, especially in the social sciences, as the classical concepts of survival, profit, and coincidence change into cooperation, diversity, and experimentation, resulting in adaptation and harmony (Laszlo, 1996). A system's worldview focuses on the concepts, perceptions, values, and practices that are shared by a community and directs its activities. This helps people understand the world they live in and can provide the clues and models for solving critical problems (Lazlo, 1996). Together mission and vision fill a deep need in humans beings to have a purpose and reason for being, quite contrary to the return-on-investment philosophy prevalent today (Senge, 1998). The mission defines the value system that guides the strategies and is the magnet that attracts and holds the interest of trustees, volunteers, staff, and contributors (Cain, 1999; Russo, 1991). Like other living systems, resource development experiences similar effects of interactions for their performance and renewal. In summary are the five system effects identified by Jervis (1999) that help explain how a system functions.

1. Delayed and Indirect Effect: The indirect effects are more important than direct as some values of life such as happiness and self-fulfillment can only be reached indirectly from the completion of other goals and activities.
2. Relations are not bilateral: No important issues exists in isolation or in parallel, thus it is highly likely that issues affect others.

3. Interactions, not additively: Systems cannot be understood by adding up the characteristics of the parts. If no change occurs this does not indicate the variable was unimportant, but signals a change may require more variables to be altered.
4. Outcomes do not follow from intentions: In a system, actions have unintended effects on the individuals and the whole system as results cannot be inferred from desires and expectations. The ensuing competition of strategizing an outcome usually surprises all involved as the phenomenon of unintended consequences is a product of these complex interactions.
5. Regulation is difficult: Some believe controlling one element will allow them to change behavior as they desire, when actually this is true only if everything else in the system remains restrained. The attempts to regulate produce undesired activities, such as the act of banning an activity makes it more attractive. (pp. 28-29)

Various types of interactions create a system, and one or all are formed within the structure and dependent on the state of another as identified by Jervis and related to resource development (1999).

- Results cannot be predicted from separate actions: Two or more elements produce results that cannot be understood by examining each alone. In order to procure funds, development professionals must depend on the identified needs and expectations within the college system and interactions to be successful.
- Strategies depend on strategies: The fate of a strategy depends on those strategies that are adopted. The interaction of strategies explains a paradoxical fact that some behaviors seemingly harmful, in fact, strengthen the variable. A weak readiness factor such as geographic location may be perceived as a strength.
- Behavior changes the environment: Initial outcomes often influence later ones, producing powerful dynamics that explain change over time, but yet cannot be captured by labeling one set of elements causes and effects. As an example, sustained change within a college may occur through the implementation of a major grant project that over time systemically impacts the culture and nature of the institution. (pp. 39-60)

Integration

There is no greater imperative for a community college than to establish a viable resource development program (Daniel, 1991; Mohrman, 1979). Based on systems theory, a college may succeed and survive depending on how well the interdependencies with

stakeholders are managed. Integrated relationship management increases the institutions ability to respond to environmental demands and changes and to prosper in an open system (Kelly, 1998). The nature of resource development efforts cannot stand alone nor operate separately from college operations, striving only to procure funds for random college purposes (Keener, 1989). Resource development must be an integral factor in the total planning, management and operation of the college, in the education of students, in the advancement of its human capital, and in the promotion of the college (Blong & Bennett, 1991; Bornhoeft, 2002; Daniel, 1991; Keener, 1982, 1989; Pray, 1981). Since strategic planning communicates the current status of the institution and where it seeks to be in the future, it provides the rationale for the development plan (Kelly, 1998). The system approach to resource development uses the college's strategic and operational planning supported by a comprehensive development plan to accomplish the mission and goals of the college. Keener (1989) provided a list of essential fundamentals to consider if the development office is to be effective and prosperous:

1. The development office is a separate entity with its own staff and operating budget.
2. Sustained presidential support and commitment from the trustees.
3. A director, dean or vice president heads the development office.
4. The college organizational structure links the development function to the entire institution. (p. 149)

Colleges that create a climate for resource development through the inclusion of the chief development officer in the management team will discover this is an effective and efficient method for increasing college resources (Blong & Bennett, 1991). Duffy (1979) confirmed having an organized and defined planned effort of resource development is a major condition for success, a conclusion supported by previous research (Keener, 1989; Silvera, 1974; Sims, 1973). Daniel (1991) stated resource development should not be an

"appendage" dangling from an assistant's arm, but rather a coordinated effort from the entire college community with well supported and well trained development officers (p. 6). Contrary to most research, Hagerman (1978) found integration was not significant to the ability of the institution to raise money.

A strategic and operational plan for resource development provides a framework to channel efficiently and effectively the external funds for the advancement of the college mission (Blong & Bennett, 1991; Keener, 1982, 1989), with grants representing one piece of the overall development process (Bornhoeft, 2002). The development plan is a significant element in making a comprehensive planning process work effectively, and, conversely, the planning process is a key reason for the success at resource development (Hooks & Kelley, 1990). During the college strategic planning process, current and future priorities must be identified and then integrated into the annual fund development plan. The resulting "intrainstitutional" development plan provides the chief development officer with the justification and framework to pursue or not to pursue project ideas in support of the college priorities (Keener, Ryan, & Smith., 1991, p. 37). This combination of critical issues and fund-raising strategies ensures appropriate response and support for the college needs (Kenner et al., 1991). Without a link to the college goals, the development goals are meaningless (Kelly, 1998).

Development Effect

The grants development function can be viewed as a living subsystem within the larger system of a college. Kelly (1998) explained that development officers serve in a boundary role between the college and the environment in which the college survives. Included in the environment are the stakeholders who can positively or negatively

influence the organization's goals and funders. Development contributes to the college effectiveness by strategically managing environmental relationships with funders, helping the organization to anticipate, adjust, and adapt to changes and opportunities (Kelly, 1998). Only when a college system has resource development integral to the core mission of the college can the development function assist to support the organizational priorities, strengthen identified weaknesses, and fill the gaps of service (Brumbach & Bumphus, 1993; Clements, 1990; Hagerman, 1978; Ironfield, 1991). Resource development activities impact virtually every aspect of the institution by being a catalyst in advancing elements of the college mission and providing a coordinated system of generating interest, involvement, and support among the college and its community (LeCroy, 1998; Miller, 1997; Robertson, 1981). Resource development cannot function apart from the organization, apart from its mission, or apart from a willingness to be held accountable (Russo, 1991). A comprehensive grants development plan becomes increasingly important during difficult economic times (Herbkersman & Hibbert-Jones, 2002).

The key to successful fund-raising is allowing the college mission and strategic priorities to be the driver for resource development (Brumbach & Bumphus, 1993; Miller, 1997). Fund-raising success depends on the grants operation having access to resources from the general college expenditures to invest in fund-raising (Clements, 1990; Ironfield, 1991) and on the organization's ability to adapt to surrounding conditions (Tempel, 1991). The deliberate strategic planning process gives direction to the development function and demonstrates how resource development supports critical areas within the mission, influences the planning process, and achieves a significant

return on investment (Brumbach & Bumphus, 1993; Herbkersman & Hibbert-Jones, 2002; LeCroy, 1988).

The development function is a catalyst for the total advancement effort, positioning the college for future challenges (Greenfield, 1991; LeCroy, 1988; Robertson, 1981). LeCroy (1988) noted it is the resource development efforts in providing adequate resources for college programs that brings a strategic plan to reality. All grants pursued should be embedded in the plan and viewed as pieces of the larger institutional plan (Hooks & Kelley, 1990). An active and productive grant operation enhances the college programs, engages faculty and staff, and keeps them current in scholarly work. Thus, it is imperative the college community understands the grant development and private fund-raising processes to ensure new initiatives are integrated into the college. Only after considerable time and effort has been spent by the president and chief development officer to foster good relations will the college obtain the "edge of excellence" and be able to make a difference in its effectiveness, and on its students' success (Brumbach & Bumphus, 1993, p. 16). An institutional focus on resource development creates an atmosphere to examine the institutional values and mission, expand the mission into the community, and provide forward planning for a more secure future.

Resource development can have outstanding achievement because of many interconnections among college departments and employees, strategic needs and available funding, and administrative directives. If one connection becomes unable to support a grant effort with personnel or resources, the grant project may become unstable and fail. Laszlo (1996) stated many types of interconnections exist and may be locked together so tightly that one change requires, prohibits, or constrains other elements. Even when structures

adjust and adapt, they maintain themselves in a dynamic state, resisting the inert equilibrium that leads to decay (Lazlo, 1996). Development staffs, as an example, are usually lean in number, resulting in each member knowing several jobs and filling in the gaps in order to maintain performance. The interconnections perceived in situations strongly influence policy decisions and behavior, and it is these interconnecting communications that allow social institutions and organizations to possess unique characteristics and act as individual entities (Jervis, 1999; Laszlo, 1996).

In an interconnected system, the obvious and immediate effect may not be dominant and might even have minimal yet wide-ranging effects since everything else does not remain constant (Cain, 1999; Jervis, 1999). The rippling effect of change and its ramifications can be intricate. For example, a college decided to adopt a health insurance plan that excluded a local hospital and its services. Unknowing, the decision makers did not realize the hospital had generously contributed to the college. As a result of the exclusion from the insurance plan, the donations ceased until the hospital was convinced some two years later that their support was essential for quality instruction and should be separate from the internal business issues. In a system, the sequence of consequences extends over time and distance, always multiplying and producing more change. "We can never do merely one thing" (Jervis, 1999, p. 10).

A system has properties discrete from its individual parts, which together create the interconnections that intertwine the systems together (Jervis, 1999). The popular phrase, "the whole is greater than the sum of its parts," does not describe a system of emergent properties. In a system, the whole is different from, not greater than, the sum of its parts, as illustrated by the inability of reducing human societies to the sum of the

individuals who compose them. Margaret Wheatley suggested an academic institution may seem like a self-organizing institution, but is probably only a group of people competing for resources because they think the institution exists just for them (Katz, 1997). The whole might be unstable in spite of its parts being stable, forming a reliable system from unreliable components in which all the interactions of properties cannot be determined (Jervis, 1999). The individual characteristics can be influenced by the system based on the terms of their positions within the system. In an educational institution these system influences may include enrollment size, fiscal soundness, location, personnel, or governance structure. The action of raising funds projects the values of the total organization, since all aspects of governance are part of the whole (Russo, 1991). The critical point is having trust and respect for the people in the system. When the leaders are trusted, the others will sacrifice for the organization (Katz, 1997).

While emergent properties explain the difference between the parts and the system, the unit relations are powerfully influenced by the interconnections of time and space (Jervis, 1999). When the interconnections are dense, as in an academic institution, the impact of change may be difficult to track, impossible to predict, and hard to control (Jervis, 1999). Any interconnection is emphasized when a system is disturbed by the introduction of a new element, such as a new president, chief resource officer, or funding adjustment. Usually, systems are resilient enough to cope with change; however, some connections can facilitate instability, resulting in one unit's inability to change unless several others change or one element controls another (Jervis, 1999).

Grants development requires special knowledge and skills. The grants officer must have knowledge of the college, the community, and sources of funding and possess

skills in good planning and communication, managerial and group processing, research, writing, budget development, and marketing. The grants process is complex and requires several individuals working together on an institutional basis to advance the college (Duffy, 1988; Gollattscheck & Hollingsworth, 1979; Herbkersman & Hibbert-Jones, 2002; Miller, 1997; Worth & Asp, 1994). The successful grants officer draws upon the resources within and external to the college in acquiring the external resources and identifying development trends (Duffy, 1988; Mecca, 1988).

Rude (1979, p. 70-73) suggested if community colleges want to improve their grants performance they should focus on the internal organization which is fundamental to a successful effort. Suggested foci include (a) emphasizing faculty involvement and incentive, (b) establishing clear priorities for grant seeking activity, (c) integrating the development program with the college long range goals and objectives, (d) focus on development rather than grant seeking, and (d) developing informal and support networks in the local community. Additional elements identified include highly motivated and trained professionals, high quality processes and systems, institutional commitment and support, and luck (Herbkersman & Hibbert-Jones, 2002). The primary role of the [college] leader is to make sure the organization has a deep, shared understanding of who they are by bringing the whole system together in conversation (Wheatley, 1999). It is imperative the development office provide a current and long-range view of its impact on the institution, and likewise, the college may need to examine new organizational structures to provide better involvement and management of the fund-raising function (Katsinas, Hermann, & Traylor, 1990). A comprehensive planning process focuses and directs the resource development process, allowing the college, faculty, and staff to be proactive in pursuing

ideas rather than reacting, and provides the framework to make wise choices in budget allocations (Hooks & Kelley, 1990). Community colleges that employ methodical processes and effective operating systems to support grant development will achieve high rates of return (Herbkersman & Hibbert-Jones, 2002).

Readiness for Success

Researchers have identified numerous characteristics that could measure highly productive development operations (Bremer, 1965; Brittingham & Pezzulo, 1990; Clements, 1990; Duffy, 1979; Greenfield, 1991; Ironfield, 1991; Jackson, 1997; Luck, 1974; Luck & Tolle, 1978; Mays, 1985; Miller, 1997; Pickett, 1977 Sharron, 1982). This study focused on identifying factors which "ready" an institution for fund-raising success within a grant operation. The variables selected for this study are supported by findings in previous studies that identified success elements (resources, organizational structure, number of staff) more frequently found in productive resource development departments (Duffy, 1979; Hunter, 1987; Keener, 1982; Koelkebeck, 1994; Miller, 1997; Pickett, 1981).

Fund-raising effectively tests an organization's viability, as it can become the catalyst for organizational renewal and commitment. In preparation for fund-raising, an organization must analyze its strengths and weaknesses and resources that are essential for fund-raising success. The five organizational strengths and vulnerabilities to be considered prior to engaging in fund-raising are institutional readiness, human resources, markets, fund-raising activities, and management (Tempel, 1991):

1. Institutional readiness comprises development of institutional and financial plans which attest to the confidence of its future and empowerment by the vision.

2. Human resources determines the ability of the board members, fund-raising professional and key staff to come together as a development team.
3. Markets refers to the sources for fund-raising activities and the organizations ability to provide sufficient information about them.
4. Fund-raising activities must be varied and supported for successful implementation.
5. The organization must be well managed by a team of administrators and fund-raising professionals who operate in an open system. (pp. 22-27)

The total fund-raising effort demands commitment to organizational values and missions, a comprehensive view of potential contributors, a mastery of professional skills and ethnical values, and quality management of planning (Tempel, 1991).

Pickett (1977) summarized that colleges who attained above-average fund-raising success possessed three characteristics: (a) trustee involvement, (b) institutional purpose, and (c) major institutional commitment to the development process. He also identified policies associated with successful fund-raising efforts, which included among the list of five the size of staff and the involvement of trustees. Success may be ensured by the support, involvement, and commitment of the college board, president, administration, and general college. However, Ryan (1989a) found community college trustees are not typically active in the fund-raising process. Duffy (1979) concluded in his study there was a positive correlation between organizational characteristics and development success. Young (1978) cited that highly funded institutions had a planned resource development program consisting of administrative activities involving the following: (a) institutional planning of educational objectives, (b) institutional decision making on funding priorities, (c) securing necessary knowledge to compete for federal funds, (d) key external relations and institutional credibility, and (e) proposal development process. In addition, there must be an administrative decision that resource development efforts will

be a positive asset and the grants effort will be given top priority by the chief executive officer (Gollatscheck & Hollingsworth, 1979; Young, 1978).

Young (1978) observed that highly successful fund-raising institutions (a) invest more dollars in supporting resource development function, (b) have personnel who are more sophisticated, (c) have full time development officers with adequate support staff, (c) have travel budgets and agency contacts that relate to total dollars received (the more contact the more dollars), (e) maintain a higher and more consistent level of funding, and (f) are committed to adequate staffing, maintaining access to information and agency contacts, and follow flexible budgets. Robison (1982) categorized the success elements into those that allow success (minimum conditions before establishment—president and college board commitments) or encourage success (action steps needed for achievement of desire—foundation board friend and fund-raising, and a foundation director) (p. 43).

McNamara (1989) noted a college must consider several issues before establishing a fund-raising program: key individuals, a fund-raising strategy, long range strategic planning, yearly fund-raising goals, prospects and solicitation, donor recognition, and needed resources for the fund-raising program (p. 159). Successful colleges share two "pre-existing conditions": an established marketing program and widespread community support (Keener et al., 1991, p. 35).

Clements (1990) used a systems theory framework to investigate selected variables (college structure, geographic location and alumni) related to success in community college fund-raising. That study hypothesized certain elements within the college system influence the degree of fund-raising success as measured in total gift income. Smith (1993) noted the president, board, and chief development officer were the

most important elements to the success of a community college development program. These observations support the belief that the existence of a full-time chief development officer, a committed chief executive, and the adoption of an "it takes money to make money" attitude as major preconditions for success (Ryan, 1989a, 1993).

Keener (1982) suggested the development operation can adopt eight service areas (planning, budgeting, financial aid, faculty enrichment, community involvement, student activities, outreach, and gift solicitation) that can form the internal system necessary for grant procurement success. From the list of recommendations Glennon (1986, p. 27) proposed for a new fund-raising model to improve the potential for fund-raising programs in small schools; six recommendations support the variables of this study. The six related recommendations focus on internal clarity of mission, institutional planning, budget commitment, critical relationship between president and chief development officer, presidential commitment, and evaluation based on meeting institutional goals.

Young (1978) hypothesized for his study of 28 Florida community colleges engaged in federal grant procurement there were 42 variables associated with funding success. After an extensive survey, site visitations, and analysis, he concluded 12 conditions and factors were associated with securing federal funds and varied among his defined "high," "middle," and "low" funded institutions (p. 1).

The 12 conditions identified by Young (1978) continue to be debated among grant professionals and administrators as to their real or perceived significance. Young's study was comprehensive in its scope of possible variables contributing to funding success with the highest ranking 12 of 28 conditions as follows:

1. A positive attitude among top administrators regarding federal categorical aid programs.

2. Institutional credibility with funding agencies
3. Support of the chief executive officer [president]
4. A well prepared grant
5. A full-time development officer
6. A well planned and coordinated institutional development program
7. Careful and targeted submission of grant proposals
8. Grant personnel well versed in college mission, goals, and priorities
9. Contact and visitation with state and federal funding agencies
10. Placement of chief development officer in the college organizational structure
11. The understanding of the college administration of the intent and priorities of federal legislation.
12. Institutional planning of goals and objectives.

Other researchers (Kelly, 1998; Koelkebeck, 1994; Miller, 1997; Webb, 1982; Worth, 1993) identified similar elements of fund-raising readiness and success: (a) a chief development officer with many years of experience, (b) high levels of professional and support staff, (c) use of management goal setting techniques, (d) complete presidential involvement, (e) administrative and faculty involvement, (f) use of support staff, (g) a chief development officer (CDO) who reports directly to the president, and (h) successful communication of role and function to the institution.

Koelkebeck (1994) in his national study of readiness factors hypothesized that college institutional readiness, both perceived and actual, is a major factor of college fund-raising success rather than the role of the foundation. He concluded the mere existence of a resource development function, such as a grants office, was not enough to attract

substantial support or grants. He identified the significant factors for readiness continue to be leadership and positive relations and can serve as possible predictors. Presidents who put a high level of energy into fund-raising preparation and effort are ultimately satisfied with the results. There must be an institutional commitment beginning with the trustees to use development to secure the external support (Ironfield, 1991).

Successful grant development requires institutional participation and collaboration of college offices working within an integrated system (Duffy, 1979). A grants office can serve as the nucleus for fund procurement to address program needs not being met by general fund sources—it can be a vital component in a multifaceted operation (Keener, 1982). An effective resource development office can be a major factor in the prosperity and growth of a community college; however, it can only be as productive as the overall college's commitment to its mission and goals, the degree of internal collaboration, and level of support (Keener, 1982). The necessary interaction is determined by the development office's need to know the major emphasis and direction of the academic, instructional, research, and service programs upon which to base possible fund-raising activities (Keener, 1982.) In so doing, the development function operates as a subsystem of the larger college system (Clements, 1990).

Discussion of the Research Variables

Grant Revenue

Community colleges are the largest sector of higher education in America, but historically receive only about 2% of all private financial support (Smith, 1993), with additional revenue provided by federal, state, and local governments. A 1999-2000 survey of 75 two-year institutions indicated a decrease of 8% in private funding from 1998-99

levels (Pulley, 2001). In contrast, governmental grants to support the development of programs for education and training increased from 2% to 20% between 1980 and 1996, averaging 15% (Honeyman & Bruhn, 1996; Merisotis & Wolanin, 2000). Luck (1974) discovered nearly 57% of the 417 colleges in his study did not participate in any type of fund-raising. However, at the same time a reduction occurred in student financial assistance with a shift in allocation of federal funds into block grants to the states with no guarantee of expenditures for higher education (Honeyman & Bruhn, 1996).

With this reduction in public support, community colleges turned to seeking funds from private, corporate, and federal sources. Still true today, the public colleges are expected to meet the demand to develop a high-skilled workforce and to meet the technology expectations of industry and business by doing more with less. Especially hard hit are rural colleges as they try to secure the same level of service for their students as those colleges in urban areas (Katsinas, 1996; Katsinas & Moeck, 2002). As public colleges are faced with financing the plethora of needs and demands, many have engaged in intensive efforts to secure additional funds, especially through grants development and fund-raising.

The most important factor in a recent study (Jackson & Glass, 2000) among development professionals was the recognition by college trustees and presidents that resource development efforts required a commitment of resources and staff. Luck (1974) in a study of public two-year community colleges found a relation between the level of committed resources and the amount of funds raised—the community colleges that spent more money, raised more money. Glennon (1986) found a significant relationship between the amount of revenue generated and the amount of revenue allocated for fund-raising. If

the development area receives only "subsistence-level" funding, the results will be fewer program options for students and less incentives for faculty and staff (Parnell, 1988, p. xvii). Glennon (1986) found that less than half of the colleges in her study committed resources for advancement activities at the suggested level between 4% and 8% of the institutional budget, thus sacrificing development productivity for low cost benefit ratios (p. 19). The literature concluded that when comparing revenue to staff operations, the investment in a development officer proves to be beneficial and necessary as a college grows in size and complexity (Ryan, 1989b; Kelly, 1998; Peterson, 1999; Robison, 1982; Worth, 1993).

Geographic Location

Robison (1982) defined a successful resource development operation as being located at a single campus district in a small city or large town populated by a community with a strong sense of local identity. Other research has found that colleges in densely populated areas received more private funds that those in sparsely populated areas (Clements, 1990).

This study used U.S. Census (Department of Commerce, 2002) data to define the geographic location categories of the survey respondents. Categories were defined as follows: Urban areas with a central city surrounded by a densely settled area with a population of 50,000 or more and exceeds 1,000 people per square mile; rural are places of less than 2,500 inhabitants; and suburban areas with populations of 2,500 living outside of urbanized areas (Department of Commerce, 2002; "Rural," 1993).

A community's geographic location and amount of wealth have an impact on development success (Duffy, 1982). This earlier conclusion is supported by Hunter (1987)

in which he found a significant relationship between an institution's geographic location and the total revenue. However, community college service areas are usually restricted to a specific geographic area, which creates unique problems that limit the number of sources for fund-raising. In addition, as the people's college, a community college serves large numbers of minorities and low-income populations who do not have the wealth for giving (Rowh, 1987). Other researchers indicated the local community provides community colleges with unique development opportunities, unlike the universities (Glass & Jackson, 1998a; LeCroy, 1998; Maples, 1980). In his study of private undergraduate colleges, Picket (1977) identified the college's "environmental position" as a measure of success (p. 36). The environmental position was measured by traditional in-state enrollment, cost of attendance, age of college, market value of endowments, and other variables and was determined to be important to the fund-raising potential. Picket (1977) concluded that access to the total pool of resources available from the environmental position was more important than the actual geographic location. Hagerman (1978) found no evidence that institutions in geographical regions of the country or who served a specific geographical area were significantly more successful than those in other areas.

College Size

Institutional size seems to be the most important variable regardless of the topic of concern, and this characteristic, more than others, differentiates public institutions from each other (Cohen & Brawer, 1996). For this study, the college size was measured in unduplicated credit head count rather than full-time equivalent (FTE) since there exist wide variations in FTE formulas used throughout the states. A 1994 NACUBO statistical study reported a variance ranging between 30 and 45 credit hours to define "full-time" student

status in order to calculate the FTE figure (Meeker, 1995). Further compounding the problem is the differing definitions of a completer and alumni (Clements, 1990).

As a key variable, the size of an institution affects the type and variety of opportunities, strategies, flexibility, communication, coordination, and professional services in undertaking development initiatives (LeCroy, 1988). Duronio and Loessin (1991) based fund-raising effectiveness as a measure of the potential to fund raise. They concluded that wealthy, large, prestigious institutions have a greater potential for raising money than institutions with modest enrollments, resources, and reputations. The Ironfield (1991) research found a significant relation between the level of fund-raising and the size of the service area. A college's fund-raising potential is related to its environmental position as a function of size, perceived quality, socio-economic level of students, and college wealth (Picket, 1977). Likewise, Degerstedt (1982) indicated that the growth and size of a college was related to having a development function as evidenced by one in three colleges being a multi-campus institution, of which each had experienced a three-year growth pattern, resulting in over 1,000 new students. Maples (1980) concluded the highly funded institutions ($1 million in federal support) had enrollments of nearly 5,000 full-time enrollment. In contrast, Young (1978) concluded the higher levels of federal funding in two-year college resource development functions appeared to be determined by effort, commitment, and planning rather than the size or location of the college.

Chief Development Officer's Experience and Tenure

Experience factor

A literature review revealed limited information pertaining to the importance of the chief development officer in a grants development effort although a myriad of literature

discusses the general characteristics of a development professional. In recent years, research focusing on the tenure and eminent retirement of senior administrators has signaled a major threat to development activities just when colleges are positioning themselves to receive the predicted intergenerational transfer of wealth (Craft & Guy, 2002; Nicklin, 1998; Vaughn & Weisman, 1998).

Development departments in small and mid-sized colleges are notoriously understaffed (Bornhoeft, 2002), and in the majority of them there is a single person or "lone wolf" (Hodge, 2002, p. 1) responsible for writing proposals and "struggling in the trenches" (Bock & Sullins, 1987, p. 17) while guiding the development operation. This "lone wolf" or "small shop" situation can create a sense of isolation due to a lack of or misunderstanding about what is required for a successful grant process. This misunderstanding can lead to unrealistic expectations from administrators about the time, effort, and resources needed to get the job done; all which will likely will impact the fund-raising program (Glennon, 1986; Hodge, 2002; Rowh, 1985). A one-man show does not work for long as the scope of work is broad and the short-term successes are precariously built on one outstanding staff member (McNamara, 1989). Most operations were managed on a part-time basis or were considered secondary duties (Robertson, 1981), and many full time directors were semi-retired professionals, former college presidents, and retired businesspersons (Sharron, 1982). Luck (1974) found 42% had either a full- or part-time position, an estimated increase of 15% from a 1971 study by Hargis. Maples (1980) reported the mean number of years of experience in development was 6.4, with over 50% of the development officers having less than 7 years of experience. Glennon (1986) found 40% of respondents had less than five years of development experience. Brumbach (1991)

reported 33 % (146) of her respondents to a 1990 NCRD survey had three years or less experience in development.

Sharron (1982) noted approximately 35% (400) of the 1,040 two-year public colleges had top management positions of deans/directors for development whose responsibility included a major emphasis in federal relations with additional duties of alumni, planning, special events, and presidential assignments (Robertson, 1981). In the CASE 2002 survey only 3% (264) of the respondents worked at associate degree institutions (Netherton, 2002). Mays (1985) noted professional development opportunities expanded when other administrative positions were shrinking, and the field of development was expanding and offered stability and access to administrative positions, especially for women and minorities.

The chief development officer position has always been perceived as a leadership role (Collins, 2002). Because of the growing need to augment public support and to coordinate development efforts, the importance of establishing an office for institutional advancement has increased (Robertson, 1981). As part of coordinated efforts, a chief development officer should be a full-time administrator well experienced in resource development and grant management, reporting to the president, with access to administrators and financial officers, and who possess the traits of a successful teacher (Greenfield, 1991; Halvorson, 1988; McNamara, 1989; Miller, 1997; Ryan, 1989b). The chief development officer is an educator first and must view advancement activities with a perspective of how it furthers the educational goals of the institution. They must be able to must see the larger goals that development can attain for the college (Ryan, 1989b), and thus balance the institution's holistic needs with the occasional interest in raising funds for

a cause that does not support the college mission (Brittingham & Pezzulo, 1990). Worth and Asp (1994) emphasized Panas' (1988) belief that great fundraisers are not made overnight or simply born, but a happy combination of the two. The chief development officer is integral to institutional planning and must be part of the senior leadership (Duronio & Loessin, 1991a; Worth & Asp, 1994). Such a relationship coupled with a grant management system ensures externally funded projects are developed in accordance with the institutions policies and procedures (Halvorson, 1988).

Optimally, the chief development officer must be knowledgeable of the community college concept and be able to articulate it to the community and others (Greenfield, 1991; Robertson, 1981; Worth & Asp, 1994). Kelley (1998) suggested that one department is needed, headed by a development officer who is knowledgeable about and educated in both fund-raising and public relations. The chief development officer plays a key role in the marketing perspective of the college and thus should be actively involved in the planning and implementation of the marketing efforts (Ironfield, 1988). The chief development officer should have the skills, ability, and professional background to warrant the title and salary of vice president for development. Although this may be difficult for most community colleges, the results of hiring an exceptional professional will be the raising of substantial funds for the institution (Greenfield, 1991; McNamara, 1989).

Tenure factor

Many development professionals believe more effort by themselves and their institutions should be made to actively recruit, promote, and retain senior-level advancement officers since the cost of turnover and the impact on fund-raising is too high (Collins, 2002, p. 33). Care must be taken by the president to find a qualified person with

the personal chemistry and a common understanding of their roles. The high turnover among development officers may stem from frustrations emerging from unclear role definitions. The flight of seasoned professionals negatively affects performance and limits their effectiveness to the institution (Worth & Asp, 1994).

The "revolving door" of the fund-raising profession (Nicklin, 1998; Schwinn & Sommerfeld, 2002) appears to be going strong and getting worse and has received little attention from researchers or philanthropic foundations. Few studies exist that measure job tenure [years at the institution] and its impact on the fund-raising efforts; a topic rarely discussed among development professionals (Brumbach, 1991; Glennon, 1986; Young, 1978). In 1986, Glennon found 60% of respondents had been at their institution less than five years. Schwinn and Sommerfeld (2002) reported findings from an Association of Fund-raising Professionals survey that found 50% of the 1,215 people responding had been in their current position for three years or less, while a Indiana University Center on Philanthropy cited in the report had similar findings.

A 2002 CASE survey report (Collins, 2002) revealed the average tenure in the development professional was between 9 and 11 years for women and men, respectfully; tenure at the current institution was about 8 years; and in the position nearly 5 years. The study found gender differences between men and women in nonsupervisory roles and for those who reported to the CEO, with the female to male ratio decreasing as supervisory levels increased, regardless of experience. The same survey confirmed women outnumber men two to one in the profession as a whole, as compared to a 1990 survey (Brittingham & Pezzullo, 1990). Although the new generation of development professionals is younger and

better educated, overall they still have less than less than three years seniority in the position.

This alarming turnover of development professionals caught in a "revolving door" represents a major cost to the institution and a loss of potential revenue (Nicklin, 1998; Schwinn & Sommerfeld, 2002). A business consultant stated that losing an employee in a revenue-generating position means taking a hit in the potential revenue to the college (Brittingham & Pezzullo, 1990). Contrary to this perception were the unexpected results of the Glennon study (1986) that indicated the shorter the tenure of the chief development officer, the more successful the fund-raising effort, perhaps as a result of enthusiastic first-timers. It was suggested the longer tenure of the CDO may be misinterpreted by others that all was well in the development area. The long tenure of a development officer was similar to that of a college president in that they both have time to build strong relationships within and outside the institution (Korschgen, Fuller, & Gardner, 2001).

In their study, Schwinn and Sommerfeld (2002) cited six reasons, which may contribute to the high turnover among development persons.

- First, the dearth of information and attention to the topic is a giant problem. Few studies exist to measure job tenure, and there are even fewer places to obtain advice on how to recruit and retain talented development professionals.
- Second, the high turnover rates are considered a natural result of a high-pressure profession. However, there are real costs, which go beyond the hiring issue to consider when a seasoned professional leaves. If a revenue-generating employee leaves, the organization is risking real and potential funds since the new hire may bring in 50% less while they learn the organization.
- Third, many theories are discussed on why development professionals change jobs so frequently. Some believe it is the shortage of experienced persons, the quest for more compensation, seeking more responsibilities and prestigious, or inclusion in the administrative functions. Development professionals want to be connected to the institution's work and become an integral part of the organization's mission.

- Fourth, it is vital to develop a comprehensive approach for improving the recruitment, employment, retention, and rejuvenation of development professionals so they stay at the institution long enough to make a difference.
- Fifth, a change in management style may off set the high pressure environment and improve job satisfaction through changes in the work culture or allowing flexible work hours.
- Sixth, administers must take time to hear why the development professional is departing and then make adjustments to improve the environment.

The trend toward greater professionalism and status can create a situation in which development officers focus on a professional identity rather than on the institution. This combined with high mobility are potentially devastating to development officers as it may lead them away from their responsibility and purpose to advance the college (Worth & Asp, 1994). The "revolving door" can result in misdirected focus, coping with a new frame of reference, short term thinking, and loss of momentum (Korschgen et al., 2001, p. 5). Although controversial, Drozdowski (2002) suggested giving fund-raisers incentives or commissions based on longevity for the funds they brought in to stem the rapid turnover, claiming the ethical arguments and funder concerns would be unfounded. Somewhat disturbing was the finding that the average stay for development professionals at an institution is three years for women and four and a half for men (Mays, 1985). The growth of the profession will require a core belief that advancement is a commitment in service to education and society (Worth & Asp, 1994). In order for professionals to be successful, more time and resources must be spent on opportunities for professional growth and flexibility.

<u>Grants operating budget</u>

A commitment to resource development can be demonstrated by trustees and the president through the process of budget allocation by where adequate funds are provided to

staff and operate the resource development office (Duronio & Loessin, 1991a; Ironfield, 1991). Much research has directly linked the success of the development efforts to the budget amounts allocated to the development operation and staff (Boardman, 1993; Degerstedt, 1982; Glass & Jackson, 1998b; Jenner 1987; Keener, 1982; Luck, 1974; Maples, 1980; Robison, 1982). Institutions must determine their own level of financial support, typically ranging from 8% to 30%, based on the net return of investment, not just on the "efficiency" rate which is influenced by the amount of time the president spends on fund-raising (Boardman, 1993, p. 273). The greater the time, the lower the per dollar fund-raising cost since the president's salary is not calculated in the fund-raising expenses (Glennon, 1986). Glennon (1986) noted that a range of 4% to 8% of the institutional budget should be allocated to advancement; however, over 50% of respondents to her study allocated a median of 3.5%. Interestingly, she found the size of the college had no bearing on the percent of budget allocated. Picket (1981) found that private undergraduate colleges with above average success in fund-raising exhibited characteristics of trustee leadership, institutional direction, and a commitment to fund-raising as demonstrated by large institutional development budgets and adequate staff. Successful fund-raising requires a strong commitment of resources to support the development program (Jackson, 1997). Hunter (1987) concluded the size of the institution's development budget was significant to the relationship with the total revenue support. The larger budgeted development functions had generated the largest revenue from external sources. The literature supports the fact the development function needs an adequate budget to support its research, communications, proposal development, professional development, and marketing functions to raise funds for the institution (Asp, 1993; Duffy, 1988). Establishing an adequate budget begins with

developing a way to measure costs incurred (Boardman, 1993). Maples (1980) concluded community colleges with larger development office budgets generated more support. Contrary to most studies, Ironfield (1991) and Clements (1990) found no significant relationship between fund-raising success and the level of the development budget.

An adequate budget for resource development is an investment, not an expense, and the appropriate level of resources will best position the institution to obtain external funding (Boardman, 1993; Brumbach & Bumphus, 1993). A study by Vaughn and Weisman (1998) revealed a critical concern among colleges presidents for increased college funding, which ironically can be expressed by their presidential commitment for sufficient operational funding to support the development needs for information, recognition, staff, equipment, and travel. Therefore, it seems wise for college administrators to view every grant received and managed well as an investment in the future of the college (Peterson, 1999).

Directly linked to having an adequate budget is the ability to hire the necessary qualified staff. There is little argument among development professionals that a staff of grant writers and managers is necessary for procuring funds (Hodge, 2002). Since, the concept of staffing is directly related to the development office budget, this researcher chose not to isolate the variable to avoid statistical complications in the analysis, although a discussion of the merits are included in the study.

By definition, fund-raising is a staff function that manages the organization's resource development initiatives and integrates these efforts across departmental units (Kelly, 1998). The staffing issue is related to and depends on the size of the institution and the development budget, the planned functions, and the complementary talents of the staff

(Evans, 1993; Kelly, 1998; Pickett, 1981; Worth, 1993). Pollard (1958) stressed the importance of full-time staff to the development effort. McCain (1974) found 64% of the 1,100 two-year colleges in his study engaged in some type of resource development, with half of those colleges devoting a full-time person to the effort. Later, Loessin, Duronio, and Borton (1987) indicated most public two-year colleges devoted less than a full-time position to fund-raising as compared to private colleges with 1.4 positions, and public universities with nearly 3 positions.

The old adage it "takes money to make money" is supported by the apparent proportional growth of development staffs and the revenue they raise. Bornhoeft (2002) stated small and mid-sized institutions are notoriously understaffed, and if more grant-writing tasks are added outside the development plan, then resources must be reallocated. It seems the use of volunteers remains limited yet beneficial to success (Duroino & Loessin, 1991; Phillippe & Eblinger, 1998; Worth, 1993). Contrary to the research that identified having a sufficient number of staff devoted to fund-raising efforts as a factor in success (Bremer, 1965; Duffy, 1979; Glandon, 1987; Jenner, 1987; Keener, 1982; Koelkebeck, 1994; Maples, 1980; Robison, 1982; Silvera, 1974), Clements (1990) found no influence of staff on the amount of funds raised.

Roles of Others

President

The literature overwhelmingly supports the importance of a commitment by the college president to resource development, and the critical role she must play. The president must be integrally involved in the resource development plans and have an understanding of the principles and trends to be effective (Blong & Bennett, 1991;

Clements, 1990; Degerstedt, 1982; Glandon & Keener, 1994; Glennon, 1986; Hunter, 1987; Jackson, 1997; Jenner, 1987; McNamara, 1988; Pray, 1981; Robison, 1982; Smith, 1993).

According to Young (1978), the support of the chief executive officer was the single most important variable to success of a grants operation, and his impact was achieved only when he was involved as an integral and ongoing partner in the process. It is imperative the college president give top priority to the federal grants effort (Young, 1978). Gollatscheck and Hollingsworth, (1979) found the college president exerts the greatest influence on policy, establishment of institutional priorities, allocation of internal resources, and assuring complete compliance to funding requirements. His knowledge of and support was crucial to the probable success of grant and fund-raising endeavors (Bock & Sullins, 1987; Koelkebeck, 1994; Jackson, 1997). The president was pivotal to the success of any fund-raising effort and was an indicator of the level of institutional commitment to this effort (Brittingham & Pelluzzo, 1990; Glandon, 1987; Ironfield, 1991; McNamara, 1989; Robertson, 1982; Smith, 1993; Worth, 1993). A report from the National Council for Resource Development (Glandon & Keener, 1994) found 80% of the respondents identified the active involvement of the college president as critical to the fund-raising effort.

The grants-oriented president who is actively involved in the entire grants effort can help promote its success through her aggressive activity. The internal resource development management process depends on presidential guidance and required her visible and audible approvals (Keener, 1982; Pray, 1981). A presidential presence demonstrated the college commitment and was the single most valuable expression of

institutional capabilities and priorities (Keener, 1982). She can cultivate the maximum development potential of the grants office and establish a culture that allows development to thrive, giving direction and purpose for grants procurement, and conveying recognition and appreciation for grants procured (Gollatschenck & Hollingsworth, 1979; Keener, 1982).

Presidential and trustee commitment to and understanding of the fund-raising process are the most critical elements for success (Duffy, 1988; Jackson, 1997; Robison, 1982) and, if not present, may affect the organizational structure (Ryan, 1989a). Presidential leadership was one of three characteristics found at each institution (Duronio & Loessin, 1991a). The president's efforts and commitment to the grants operation can demonstrate to the college trustees the necessity of the grants effort. His actions, alone, can affect the trustees' attitudes and actions toward the grants solicitation process (Gollatscheck & Hollingsworth, 1979). If these individuals understand the fund-raising process, then unrealistic expectations for grants development will not be imposed; project coordination is guaranteed; and effective planning will be allowed to take place. One reason for the failure of community college development may be because the college president has limited experience in fund-raising (Robertson, 1982). Another reason for limited success may be that presidents are unprepared or unwilling to accept a fund-raising role (Ironfield, 1991; Sharron, 1982).

In the Vaughn and Weisman (1998) study, more than half of the responding presidents identified funding as the most critical issue facing the community college. The presidents' overwhelming response to this critical issue listed resource development as the means for obtaining funds. That concern can be expressed by a presidential commitment in

the budget decision, which affects the operational and programmatic functions of the development operation. Additionally, success can be achieved if the chief development officer has direct communication with the president and can help build an incentive system to encourage faculty and staff involvement (Gollatscheck & Hollingsworth, 1979). The president plays the key role in all foundation [resource] development, making it clear to unit leaders resource development has continuing top-level support (Bulpitt, 1982).

Although development has not been a job requirement for community college presidents, it may be prudent for presidents to acquire such knowledge for leadership success (Robison, 1982). Survey findings (Duffy, 1988) support the president's philosophical and administrative commitment as significant to obtaining federal assistance. The president provides the linkage between the institution's needs and the capability of the grants office to meet those needs. The president's relationship with and perception of the grants office role are vital to its success, especially when the efforts support a shared commitment to the college mission (Gollattscheck & Hollingsworth, 1979).

In summary, "there can be no less than total commitment" (Robertson, 1982, p. 75) from the president for a development program. There is no substitute for presidential involvement and support (Keener, 1982), and development success depends on the president's commitment of time and energy (Robertson, 1982). Professional development is needed to educate college leaders about resource development and how to raise funds (Jackson, 1997). Robison (1982) concluded a development function should not be activated without the belief in, understanding of, and support of two most important elements—presidential support and board commitment.

Chief development officer

A new profession of resource development officers has emerged in community colleges as a direct result of an increased availability in public and private funds and from the professional support of national organizations such as Council for Resource Development and Council for Advancement and Support of Education (CASE) (Ironfield, 1991; Parnell, 1988; Worth & Asp, 1994).

The person responsible for development should be an important, well-recognized, and senior management position at the college and be able to maintain a good working and open communication relationship with the president. Worth and Asp (1994) found the development officer's role as managerial and highly supportive of the president as fundraiser. The development officer should have qualifications to be accepted by constituents inside and outside the college. (Robertson, 1982; Worth & Asp, 1994). Importantly, the respect and trust of the chief development officer (CDO) held by the president and college staff provided the impetus and foundation for the CDO to make things happen within the deadlines and constraints of the business (Brumbach & Bumphus, 1993). The only way they can be truly committed are for them to be considered full members of the management team (Worth & Asp, 1994). The development officer was found critical in importance in the Jackson study (1997), and it was highly suggested the position be elevated to a senior level position to ensure involvement in institutional planning and decision making. Development success is attainable if the chief development officer has direct communication with the president and can assist in establishing an incentive system to encourage faculty and staff involvement (Gollatscheck & Hollingsworth, 1979). The organizational relationship of the chief development officer to

and with the president positively affected the amount of revenue generated (Glennon, 1986).

Worth and Asp (1994) identified from an extensive literature review four distinct roles for the development officer which addresses the myriad roles needed for practicing development: salesman, catalyst, manager, and leader. They concluded a development officer should be "well-rounded, intelligent, personable, capable, and gifted in communication" (p. 39); being all things to all people, while simultaneously being a "good pest" (p. 41) without fear of rejection. Brumbach (1994) conducted an extensive job analysis of the chief development officer by means of a DACUM (Develop a Curriculum Process), which revealed a pronounced advocacy role with college leadership, donors, and business. McNamara (1988) concluded the chief development officer, as a key element for success, must be an effective administrator and manager, a person of integrity, competent, and provide leadership to others. The development officer must find the appropriate mix of roles without "standing out too much" or being seen as too unconventional or controversial (Worth & Asp, 1994, p. 41). Worth and Asp (1994) illustrated the passion within a development professional through the thoughts of J. Panas:

> The soul and spirit of fund-raising is a beguiling blend of needs and desires, grind and gratifications. The alchemy of sacrifice and personal contributions goes far beyond any material reward we could hope for. This business, it is the ultimate venture. Those who are inspired and successful in the field live each day as the wildest of all explorations. The chance to catch a close view of things seen never before. (p. 41)

The majority of colleges in the Degerstedt (1982) study noted the chief development officer reported to the president or college board, a sound assurance for development success. Jenner (1987) concluded the resource development officer was most responsible for success. Maples (1980) indicated the highly funded colleges had

development officers experienced in the field of development. A significant finding by Hagerman (1978) indicated an institution's entry into resource development was the appointment of a person who could spend the needed time to develop an effective resource development program. The development office has a difficult job—guaranteeing measurable results based on outcomes not totally in their control. Development officers share with the president, trustees, and a few others the enormous responsibility for the welfare of the institution and its future success (Worth, 1993). The most professional, skilled, and paid full-time staff members were primary factors associated with colleges raising more funds (Clements, 1990; Degerstedt, 1982; Gallagher, 1964; Glennon, 1986; Jenner, 1987; Maples, 1980). Hagerman (1978) found evidence the experience of the development person was not significant; however, the willingness to devote time to the budget and to do a good job was significant. The experience of the chief development officer was seen as an important element in fund-raising success (Glennon, 1986). Therefore, it is essential to have an individual devoted to the resource development operation and provided with adequate clerical assistance, an office, and budget to support activities. Robison (1982) noted in her study there were no successful operations, which failed to provide such support.

Evaluation Criteria

Institutional goals

A review of the literature identified readiness and success factors that included revenue generated, age and size of college, age of the operation, staffing, community wealth, institutional commitment, careful communications, and fiscal assistance provided by the college (Degerstedt, 1982; Duffy, 1982; Hagerman, 1978; Luck & Tolle, 1978;

MacRoy, 1970; Robison, 1982). Based on the literature, the evaluation variables of "meeting institutional strategic goals" and "total dollars awarded" were selected for analysis.

Resource development success is dependent on the college commitment to provide adequate staff, institutional resources, and priority placement in the organization (Koelkebeck, 1994; Ryan, 1989a,1993; Smith, 1993). In terms of supporting the mission, resource development efforts can provide and expand accessibility by geographic, financial, or programmatic endeavors (Wattenbarger, 1982). The measure of development success depends on the reasonable projection of grant activities necessary to support the college priorities with the existing resources (Bornhoeft, 2002). The quality of the college's products—successful students, effective programs, and respected faculty members—are the bottom line measure of success (Smith, 1993). Thus, a development plan grounded in the college mission with reasonable projections, and coupled with adequate resources can provide a standard performance assessment tool and guide for the grant operations (Asp, 1993; Bornhoeft, 2002).

Clements (1990) stated more precise evaluation criteria are needed to effectively measure fund-raising performance within a system environment that goes beyond the total income or income ratio to FTE enrollment. Duronio and Loessin (1991) discovered in their study that planning, goal setting, and evaluation were not characteristics of fund-raising programs, and were not considered critical management factors in success. Financial comparisons with national and peer group data provided a starting point for discovering the college strengths and weaknesses, improving the decision-making process, setting performance goals, making revenue projections and allocations, deciding staffing patterns

and class-size loads, determining categorical expenditures, and assessing institutional effectiveness (Meeker, 1995).

Evaluation planning together with communication and motivation are necessary elements to the development and success of an organization. Senge (1998) emphasized that no learning can occur without continuous assessment completed by the learners to enhance the capacity to produce intended outcomes. This planning provides a framework for integrated decision making throughout the organization and can result in a substantial return on the investment (Duffy, 1982; Robertson, 1982). Such a planning process can provide the opportunity to identify current and future college priorities, which when integrated into a fund development plan will ensure the college issues and priorities are adequately and appropriately supported by the development efforts (Bornhoeft, 2002). A development office that routinely evaluates its efforts was more satisfied and obtained greater funding per full time student than an office with no established evaluation criteria (Hagerman, 1978). Duffy (1982) indicated the following conditions within a college plan have relevance to the support of a resource development function in a community college:

1. An organized and defined planned effort at fund-raising and resource development involving the president and community.
2. Involvement of community leaders.
3. Has a professional person working with the president to establish fund-raising plans.
4. The development plan has a clear statement of purpose.

Continuing, Duffy (1982) discussed key studies that identified the need for good communications with internal and external groups. He contended that when the needs of the college are communicated effectively through grant proposals, the college competes

more successfully. Hagerman (1978) confirmed that the institutions which believed their development efforts were successful implemented communication channels allowing awareness of institutional goals, communication with the community, and utilization of funded and nonfunded projects for ongoing evaluation and planning. When a successfully developed grant proposal was funded, it enhanced the college capabilities to serve the students and community (Duffy, 1988). Appropriate measures should meet institutional needs and fall within the established college goals, objectives, and priorities (Hagerman, 1978). A proposal markets an institution's capabilities to successfully complete a project within a specified timeframe and budget (Ironfield, 1988).

Motivation for development was found in successful foundations (Robertson, 1982). A president's goal should be to have the grants office objectives consistent with institutional objectives, resulting in success for both operations (Gollattscheck & Hollingsworth, 1979). Knowledge of the president's support will motivate faculty, staff, and friends of the college to assist in its resource development efforts (Robertson, 1982). Duffy (1982) found several motivating conditions are related to grant and contract operations, and included the following:

1. Diverse activities that allows people to participate in activities to foster community development.
2. Development of people-oriented programs that lead to resource and fund development.
3. Activities which allow for special recognition of those involved in development.

Leslie's (1969) studied the effectiveness of fund-raising identified measures of tangible factors (institutional type, academic offerings, size of alumni, number of graduate schools, and geographic location) and intangible factors (commitment of chief executive,

prior financial support, and faculty involvement) that affected fund-raising potential. Leslie concluded the combination of policies and procedures with effective governance increased the productivity of a fund-raising program. Pickett (1977) developed a significant four-variable equation to estimate the income received by a four-year college that comprised the size of the alumni, wealth of endowment, socio-economic clientele, and academic quality measured by number of alumni in graduate school. Hagerman (1978) assessed the integration of development efforts into the total institutional structure and concluded there was virtually no relationship between the variables of (a) awareness of institutional goals, (b) involvement in goal setting, (c) access to college president, and (d) communication with other college components and the amount of external funding received. He concluded it was more important for the chief development officer to know the institutional goals, rather than participate in their development.

Total dollars awarded

In too many institutions the measure of success for resource development was only focused on the total amount of grant dollars received (Hunter, 1987; Luck, 1974; Silvera, 1974). Fund-raising has been equated to marketing theory; it is effective only if it generates targeted amounts of revenue, and the more money raised increases the value of that organizational function (Kelly, 1998). Hunter (1987) discovered in his study the chief development officers rated total voluntary support as the most important criteria to determine success. It seemed that if the financial expectations of college administrators and trustees are not met, it was concluded the return on college investment was not sufficient to continue the operation (Boardman, 1993). Viewing the development expenditures as a return on investment can be misleading. Each development area such as grants, alumni, and

annual giving should have its own measures linked to the allocated budgets. Most fundraisers insisted that total dollars raised was the most appropriate criterion to measure the effectiveness of a development program (Duronio & Loessin, 1991a). Hagerman (1978) concluded the use of total dollars generated as a means for evaluating development success was not found to be a significant measure. He suggested more appropriate measures through a planned effort be used to help address institutional needs. Administrators must be reminded that "development expenditures are not simply administrative expenses, but rather investments in one of the few revenue centers at a college or university" (Boardman, 1993, p. 270). The value derived from a development operation can be clarified by four categories which explain the economic value of an education (Honeyman & Bruhn, 1996): (a) monetary value to the individual, (b) monetary value to society, (c) the social value provided to the individual, and (d) the social value to the efficient functioning of society. Funds acquired by a development operation give life to these economic indicators of value.

Evaluation of total dollars is straightforward; however, successful fund-raising involves many factors. Kelly (1998) adamantly stated that neither the development function nor the development officer should be evaluated by dollar totals. She warns that institutions may promote unethical behavior if they impose evaluation by dollars rather than by objectives. The development staff should not be measured only on total dollars raised but also on their ability to implement effective fund-raising strategies and techniques and on the ability to manage a complex process involving multitudes of individuals who would rather be doing anything else (Boardman, 1993; Duffy, 1979).

Summary

The review of the literature regarding a grants operation clearly supports a positive relation among resource commitments, presidential leadership, and a systemic organization to provide a ready environment for fund-raising. For overall success, the entire institution must recognize the benefits of a resource development operation and embrace the philosophy that resource development is every college employee's business (Blong & Bennett, 1991).

Despite the challenges or arguments, the fact remains community colleges need additional funds to provide the "margin of excellence" (Bock & Sullins, 1987, p. 19) not supported through public funds. Effective development sustained over time will depend upon effective, deliberate, and professional management of staff, resources, and processes (Duronio & Loessin, 1991a). Community college fund-raising is here to stay, and the successful development offices will provide the funds to set apart the excellent colleges from the mediocre ones (McNamara, 1989). Resource development in bad economic times is not a happenstance endeavor (Blong & Bennett, 1991, p. 33). Resource development is the link between the planning and action. The effectiveness of a community college to "shape its destiny" (Daniel, 1985, p. 32) in the new competitive marketplace will belong to those who integrate planning, accountability, and resource development (Ironfield, 1991). The commitment of resources, now, will ensure a strong financial edge to those institutions far into the 21st century (McNamara, 1989).

CHAPTER 3
METHODOLOGY

The contents of this chapter are a description of the procedures that were used in this study. The subsections are introduction, population and sample, instrumentation, data collection, data analysis, and summary.

Introduction

The purpose of this study was to identify model factors that indicate readiness for success to enable community colleges to successfully engage in resource development activities. This study determined whether differences existed among grant-generated revenue and variables related to the college and grant office operation when controlled for the other variables. The variables selected for analysis from a review of the literature included the grant office operating budget, the chief development officer's years of experience and tenure, critical evaluation factors of meeting institutional goals and total dollars awarded, critical roles of the president and chief development officer, college size as measured in unduplicated credit head-count enrollment, and geographic location. The application of a systems theory allowed a holistic approach to the relations between the outcome variable of grant-generated revenue and the explanatory variables. The following research questions were raised:

1. What is the relation between grant revenue raised and the **grant office operating budget** when controlling for the other explanatory variables of interest in the proposed regression model?

2. What is the relation between grant revenue raised and the **critical role of the college president** when controlling for the other explanatory variables of interest in the proposed regression model?

3. What is the relation between grant revenue raised and the **critical role of the chief development officer** when controlling for the other explanatory variables of interest in the proposed regression model?

4. What is the relation between grant revenue raised and the **years of tenure of the chief development officer at the institution** when controlling for the other explanatory variables of interest in the proposed regression model?

5. What is the relation between grant revenue raised and the **years of experience of the chief development officer** when controlling for the other explanatory variables of interest in the proposed regression model?

6. What is the relation between grant revenue raised and the **evaluation factor of meeting institutional goals** when controlling for the other explanatory variables of interest in the proposed regression model?

7. What is the relation between grant revenue raised and the **evaluation factor of total dollars awarded** when controlling for the other explanatory variables of interest in the proposed regression model?

8. What is the relation between grant revenue raised and the **geographic location of the college** when controlling for the other explanatory variables of interest in the proposed regression model?

9. What is the relation between grant revenue raised and the **college size as unduplicated credit head count** when controlling for the other explanatory variables of interest in the proposed regression model?

Population and Sample

The data for this study were derived from a survey developed by a University of Florida research team in the Institute of Higher Education, of which this researcher was a member. The survey was based upon the team's knowledge and experience in the area of resource development and understanding of comprehensive community colleges. A thorough review of the literature was used as a basis to formulate the survey questions most appropriate for the community college setting. The research team enlisted the assistance of

resource development professionals in two separate reviews to refine and test the 60-item instrument. The two panels of reviewers (Appendix A) were national officers and directors of the Council for Resource Development (CRD) or independent consultants actively engaged in fundraising and foundation activities. The survey instrument was field tested for clarity, accuracy, and pertinence by these professionals in two different reviews during March 2000 and again in May 2000 for the purpose of increasing the validity and reliability of the instrument. The first panel of reviewers was primarily the 2000 CRD Board of Directors who received a draft of the survey and evaluation form (Appendix B) in March 2000 with instructions to forward their comments by March 28, 2000. The research team incorporated their comments and suggestions into a second draft that was mailed with an evaluation form to the second panel of CRD and independent consultants in May 2000 with a comment response deadline of May 15, 2000. A final survey was developed with consideration of all the responses from the distinguished panel of reviewers.

The survey was constructed in three sections and contained 60 questions in the 6-page test instrument (Appendix D). Two types of responses were used, multiple choice or completion. Depending on the question, respondents were asked to select one or more items from the multiple choices. Several questions required the respondent to fill in spaces with numbers, titles, or dollar amounts.

The survey contained a separate cover letter from the university research team (Appendix C) with instructions and an informed consent disclaimer to the respondents. On the original letter identification logos of the sponsoring organizations was printed in the left margin: University of Florida, The Council for Resource Development, The Clements Group, and the Association of Community College Trustees. The instructions specified

whom to contact if questions arose and how to return the completed survey by the specified deadline date.

The survey was mailed to 968 public two-year community colleges in the United States and territories who were members of the Council for Resource Development (CRD) or American Association of Community Colleges (AACC) at that time. A total of 380 (39%) surveys were returned representing 45 states, one U.S. territory, and the 10 CRD regions. For this study, only colleges in the U.S. and territories who were members one or more years between 1998-2001 in the Council for Resource Development were selected as the sample population. An extensive review of CRD memberships between 1998-2001 resulted in a membership average of 650 public, two-year community colleges, of which 362 (95%) were usable for this study.

The survey was comprised of three sections: College Profile, Grants, and Foundation. For this study, data from the college profile and grants sections were used for analysis. Section 1 (questions 1-23) consisted of college profile information, e.g., year college established, credit and unduplicated head-count enrollment, geographic location, college governance structure, identifying the existence of a grant and/or foundation office, and institutional budget to provide comparative data.

Section II (questions 24-39) of the survey contained questions about the grants development operation, if the college had identified having this function. The appropriate person primarily responsible for the external grant operation was asked to complete the data in this section. Data requested pertaining to the grants operation included the number of staff assigned; the status, degree, years of experience, years in current position of the primary individual for grants and who they report to; time spent on grant tasks, the

operating budget, and revenue received in 1998-99; evaluation factors; and critical roles of others.

Section III (questions 40-60) of the survey had similar question categories as Section II but addressed the foundation operation if the college had identified having this function in Section I. Since this study focused on the grants operation, data from the foundation section was not used in the analysis.

The survey was sent to the college president and the chief development officer with directions that requested them to direct the survey, if necessary, to another appropriate individual in one of the respective operations. For eligibility as a survey participant, the criterion stated the college must be categorized as a public, two-year institution. When appropriate, surveys were sent to the president of a community college district to avoid duplication of information if a centralized development program existed.

The initial mailing was sent in July 2000 addressed to the president and chief development officer of each member college with enclosures that included the cover letter from the university research team, the instructions and the survey questions. Instructions were provided on the survey response deadline of August 2000, and the methods for return of the survey either by mail or facsimile. A month following the first mailing, an email was sent to the combined memberships to remind them to complete and return the survey. To ensure survey responses would be complete as possible, a second mailing was sent approximately 12 weeks later to those not responding to the first mailing with a subsequent email reminder. This second survey packet contained the identical materials as the first mailing with a deadline of December 20, 2000, for receipt of the surveys. Upon receipt of the surveys the university research team assigned a code to each for anonymity, and survey

responses entered into a database utilizing Microsoft Excel software. As a member of the research team, this researcher was allowed access to the survey data for this study.

This researcher focused on the study of independent variables, which may be indicators of success readiness related to the grant-generated revenue in public community colleges. The population for this study was limited to public, two-year community colleges in the United States and territories that were members of CRD one or more years between 1998 and 2001. Private, two-year colleges, tribal or colleges in foreign countries although CRD members, were not part of this study.

For this study, college size was determined by using the unduplicated credit head count enrollment provided by the respondent from survey question #12, rather than the full-time equivalent enrollment data as reported in survey question #13. The variances from state to state in calculating full-time equivalent (FTE) formulas could not provide reliable comparisons for analysis. From a review of the literature, this researcher determined the unduplicated credit head count was considered a more accurate comparison measure (Meeker, 1995). The Carnegie (1994), National Center Educational Statistics Methodology Report (Phipps, Shedd, & Merisotis, 2001), and the Katsinas (1993; 1996) classification system for two-year institutions were not used since the categorical structures of size did not correspond or provide clarification of the survey size needed for analysis.

This study used the Census 2000 data to help define the geographic location categories of the respondents. Categories were defined as such: Urban areas with a central city surrounded by a densely settled area of a population of 50,000 or more and exceeds 1,000 people per square mile; rural are places of less than 2,500 inhabitants; and suburban

areas having populations of 2,500 living outside of urbanized areas (Department of Commerce, 2002; "Rural," 1993).

Instrumentation

The data were obtained through the use of a 60-item survey instrument (Appendix D) designed from a review of relevant literature and the review of a previously administered survey from the Council for Aid to Education (1998). The survey instrument for this study was validated through two separate review processes conducted by panels of reviewers (Appendix A) from resource development who were public college administrators, the CRD 1999-2000 Executive Board of Directors, and private consultants. For each review, the panel received drafts of the survey, an evaluation form, and instructions for submitting comments. The survey instrument was field tested in March 2000 and again in May 2000. The first panel of reviewers, primarily the 2000 CRD Board of Directors, received a survey draft and evaluation form (Appendix B) in March 2000. The research team incorporated these comments into a second draft that was mailed to the second panel of reviewers in May 2000. The final survey was developed with consideration of all the responses from both review panels. The research team completed the research protocol required for the study and received approval to proceed with the study in June 2000 from the University of Florida Institutional Review Board.

The final survey instrument (Appendix D), participant instructions containing the informed consent, and introductory cover letter (Appendix C) were mailed in July 2000 to the selected population. Surveyed colleges were asked to respond by August 15, 2000. The first mailing resulted in 253 returned surveys. The researcher desired a larger return rate, thus a second mailing was conducted in January 2001. Responses from both mailings

resulted in the receipt of 380 surveys from the population for a survey response rate of 39.25%. Applying the eligibility of CRD membership and U.S. public two-year status, 362 (95%) of the 380 colleges were included in this study.

The survey instrument (Appendix D) was comprised of three sections: College Profile, Grants, and Foundation. For this study, data from the college profile and grants sections were used for analysis. Data collected included descriptive data from Section I about the college, geographic location, and enrollment, and Section II focused on the grant operation.

The questions from Section I, College Profile, were used to collect data for the statistical analysis of the 362 respondents and included the following:

Question 2: The year the college was established.
Question 5: The state where the college is located
Question 12: The unduplicated credit enrollment.
Question 15: The geographic location of the institution.
Question 16: The college structure
Question 18: The presence of a chief development officer.
Question 20: The presence of a grant office.

The Section II, Grant Development, data were used to collect data for the statistical analysis of the 362 respondents and included the following:

Question 25: The year the grant office was established.
Question 27: The years in development and years at the institution for the chief development officer.
Question 33: The grant office-operating budget.
Question 34: Amount of grant-generated revenue from all sources.
Question 36: Evaluation factors used to measure grant operation performance.
Question 39: Roles of college persons in the grant operation.

Additional data were obtained by using the state information provided in the survey to determine the membership status and CRD region (CRD, 1998, 1999, 2000, 2001). The public two-year status and unduplicated enrollment for 1998, the survey year,

were verified by the Integrated Postsecondary Education Data System (NCES,1998) information.

Data Collection Method

The survey instrument was mailed in July 2000 to the office of the college president and the chief development officer or appropriate college individual at each of 968 community colleges as identified in the membership directory for CRD and AACC. The contents of the mailings contained a cover letter addressed to the individuals who would complete the survey, an instruction sheet for completion and return of the survey, with the informed consent, and the survey instrument (Appendix D). A second mailing was conducted in January 2001 to increase the rate of return. Upon receipt of the surveys to the university research team, the individual surveys were coded for anonymity and survey responses entered into a database utilizing Microsoft Excel software.

Analysis of Data

The variables were chosen based on a review of relevant literature. The variables selected for analysis included the grant office operating budget, the chief development officer's years of experience and institutional tenure, critical evaluation factors of meeting institutional goals and total dollars awarded, critical roles of the president and chief development officer, college size as measured in unduplicated credit head-count enrollment, and geographic location. Nine research questions were developed for the selected independent variables. Descriptive and inferential statistics were conducted on the data from the 362 eligible respondents. A multiple linear regression was run on the 362 data set using the SPSS 10.0 system for analyzing data. A linear multiple regression model was selected to test the variables because the explanatory variables were continuous, and it

was not known if one variable was more important than another. The multiple regression analysis was run as a full model in which all variables were entered at once and the analysis generated. Descriptive statistics calculated included the standard deviation, number, and mean, followed by inferential statistics of a linear regression analysis which included the regression equation, standard error, semi-partial correlations, standardized coefficients, unstandardized coefficients, the regression and residual sums of squares, and the F ratios.

The research hypothesis for the linear multiple regression model will result in statistically significant and positive relations in the independent variables with effect on the dependent variable. A formula for the linear regression model was developed and included each variable. The regression formula model is as follows:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_8 + \beta_9X_9 + \varepsilon$$

When the nine variables and covariates are placed into the regression model, the following formula results:

> Grant revenue = β_0(constant) + β_1*(grant operating budget) + β_2* (critical role of president) + β_3* (critical role of chief development officer) + β_4* (years at institution for chief development officer) β_5* (years of development experience of chief development officer) + β_6* (evaluation factor for total dollars awarded) + β_7* (evaluation factor for meeting institutional goals) + β_8* (geographic setting) + β_9* (college size) + ε (error).

The proposed regression model compares the relation between the outcome variable and eight explanatory variables while controlling for all variables of interest. The scales for the two evaluation variables and two critical roles variables were given values of 4-3-2-1 in the data set with "4" representing the highest value. The three geographic location variables were changed into dummy variables and were represented in the data set by rural (1,0), urban (0,1), and suburban (0,0). Suburban was used as the mean for this variable.

It was anticipated the multiple regression model would result in statistically significant measures of relations among the variables and would indicate a good model fit. The research hypotheses are as follows:

1. There should be a statistically significant relation between grant revenue raised and the **grant office operating budget** when controlling for the other explanatory variables of interest in the proposed regression model.

2. There should be a statistically significant relation between grant revenue raised and the **critical role of the college president** when controlling for the other explanatory variables of interest in the proposed regression model.

3. There should be a statistically significant relation between grant revenue raised and the **critical role of the chief development officer** when controlling for the other explanatory variables of interest in the proposed regression model.

4. There should be a statistically significant relation between grant revenue raised and the **years of tenure of the chief development officer at the institution** when controlling for the other explanatory variables of interest in the proposed regression model.

5. There should be a statistically significant relation between grant revenue raised and the **years of experience of the chief development officer** when controlling for the other explanatory variables of interest in the proposed regression model.

6. There should be a statistically significant relation between grant revenue raised and the **evaluation factor of meeting institutional goals** when controlling for the other explanatory variables of interest in the proposed regression model.

7. There should be a statistically significant relation between grant revenue raised and the **evaluation factor of total dollars awarded** when controlling for the other explanatory variables of interest in the proposed regression model.

8. There should be a statistically significant relation between grant revenue raised and the **geographic location of the college** when controlling for the other explanatory variables of interest in the proposed regression model.

9. There should be a statistically significant relation between grant revenue raised and the **college size as unduplicated credit head count** when controlling for the other explanatory variables of interest in the proposed regression model.

Descriptive statistics of frequencies, means, and percentages were calculated for the target population and included geographic location, year college established, year grant

office established, the college structure, enrollment, existence of a chief development officer, existence of a grants office, experience and tenure of the chief development officer, total grants revenue, and grants operating budget. A data analysis of the 362 respondents yielded the following summary findings regarding the Council for Resource Development member institutions in 1998.

- The total of all 1998 grant revenue reported was $ 1,197,915,200.
- The mean of total grant revenue from all sources reported was $4,145,035.
- The mean revenue for Urban colleges was $7,421,740, Suburban $3,669,518, and Rural $2,326,366.
- The mean enrollment was 9,366 students.
- The decade of the 1960s witnessed the greatest growth of colleges with 169 (46.7%) being established.
- The decades from 1971 to 2000 resulted in only 51 (14.1%) of new colleges being established.
- The decade of the 1990s witnessed the largest establishment of grant offices with 119 (32.9%)
- The mean operating budgets for Urban colleges was $241,054, Suburban $129,509, and Rural $82,530.
- The largest group of colleges (54%, n = 116) reported operating budgets below $100,000, and 18% (n = 38) of respondent colleges had budgets over $300,000.
- No respondents reported having a grants office prior to 1961.
- The largest group of respondents, n = 156 (43.1%), identified their location as rural.
- Urban (n = 105, 29%) and suburban (n = 101, 27.9%) colleges were equal represented.
- All 10 Council for Resource Development regions were represented.
- The largest percent of respondents, 48.9% (n = 177), identified themselves as single campus colleges.

- Forty percent (n = 146) of respondents reported as being a multi-campus district.
- Two hundred eighty-five respondents (78.7%) have a chief development officer.
- Seventy-four (20.4%) respondents answered "no" to having a chief development officer.
- The largest percent of respondents 70.2% (n = 254) have an established grant office.
- One hundred eight respondents (29.8%) do not have a formal grants office.
- The mean years of tenure at an institution for the chief development officer was 8.9 years.
- Tenure between 0 and 5 years for the chief development officer resulted in the highest percentage 34.8% (n = 126) among all respondents.
- The mean years for experience for the chief development officer were 10.75 years.
- The largest group of respondents, 80 in number (22.1%), had between 0 and 5 years of experience.

Descriptive data of means, percentages, and frequencies were calculated from selected section 1 college profile questions and section 2 grant section questions.

Geographic location was captured by question #15 as the responding colleges (N = 362) self-identified their location as rural, urban, or suburban (Table 3.1). The largest group of respondents identified their location as rural representing 43.1% (156) of the 362 respondents. The locations of urban and suburban were represented as 105 (29%) identified as urban, and 27.9% (n = 101) identified as suburban. Each of the 10 Council for Resource Development regions were represented, thus demonstrating the broad national scope of this study.

Survey question #2 asked what year the college was established. Grouping colleges (n = 351) by the decades from 1900, the decade of the 1960s witnessed the

greatest beginnings for colleges with 46.7% (169) being established, followed second with 9.7% (35) in the 1920s. The three decades from 1971 to 2000 resulted in only 14.1% (51) of new colleges being established. The mean years the colleges have been established by geographic location ranged between 40 and 47 years (see Table 3.1).

In question # 25 respondents (n = 221) were asked what year the grant office was established. Inverse to the colleges being established in mid-century, 32.9% (119) of the responding college grant offices were opened in the 1990s, followed second with 16.9% (61) in the 1980s, and 7.7% (28) in the 1970s. No respondents reported having a grants office prior to 1961. The mean years for the establishment of the grant offices by geographic location ranged from 9 to 12 years (see Table 3.1).

Colleges (N = 362) were asked to identify their structure in question # 16 from among three choices: multi-college district, multi-campus district, or single campus. For all colleges, the largest percent, 48.9% (177), identified themselves as single campus colleges, while 40.3% (146) considered themselves a multi-campus district. Only 9.9% (36) categorized the college as a multi-college district. Less than 1% (3) identified the structure as Other. When the college structure was categorized by geographic location, the single campus structure dominated the rural setting, while the multi-campus district structure was secondary for all location (see Table 3.1).

Table 3.1

Statistical Description of the Target Population

	Rural	Urban	Suburban
Frequency	156	105	101
Mean for Size	3,840	15,384	11,646
Mean Total Grant Revenue			
Unadjusted	$2,326,366	$7,421,740	$3,669,518
Adjusted (listwise n = 174)	$4,029,210	$5,717,849	$3,317,184
Mean Grants Office Budget	$82,530	$241,054	$129,509
Mean Years College Established	46	47	40
Mean Years Grants Office Established	9	12	11
Structure			
Multi-college district	4	22	10
Multi-campus district	52	49	45
Single campus	98	34	45
No. Chief Development Officer	124	84	77
No. Grants Office Established	89	88	77
Mean Tenure of CDO	9.2	9.1	8.4
Mean Experience of CDO	9.1	12	12

Enrollment was calculated from the unduplicated credit head count provided in survey question #12. The mean among all the 362 respondents was 9,366.77 students and ranged from reporting 311 to 96,574 enrollments. Grouping the respondents by

geographic location, the mean enrollments were Rural 3,840, Urban 15,384, and Suburban 11,646 (see Table 3.1).

In survey question #18, respondents (n = 359) were asked to acknowledge if there was a person identified as a chief development officer. Overall respondents answered "yes" in 78.7% (285) of the colleges, and "no" in 20.4% (74) of the colleges, with three not answering the question. Between 77%-80% of respondents regardless of geographic location reported having a chief development officer. The geographic categories resulted in Rural (n = 155) with 124 CDOs, Urban (n = 105) with 84, and Suburban (n = 100) with 77. Similarly, overall respondents (N = 362) acknowledged in question #20 the existence of a grants office in 70.2% (254) of the colleges, leaving 29.8% (108) without a formal office of operation identified. The geographic categories resulted in Rural (n = 155) with 89, Urban (n = 104) with 88, and Suburban (n = 101) with 77, with percentages ranging from 57% to 85%.

The tenure at the institution of the chief development office (CDO) was captured in question #27 by responding colleges (n = 276). The means by geographic category ranged between 8.4 and 9.2 years. For all respondents, the mean was 8.9 years for the CDO with a range from .3 years to 37 years at the institution. Single year observations resulted in the largest group of respondents, 12.7% (46), reported having 1 year or less tenure at the institution, followed by 2, 3, and 4 years of tenure at 6.1% (22), 5.8% (21), 6.1% (22), respectively. Tenure at 5 and 10 years was both 3.9% (14). When tenure was observed as a span of years, the highest percentage occurred with 126 (34.8%) respondents having from 0-5 years at the institution, with 24.6% (89) there from 0-3 years. The next largest grouping occurred between 6 and 10 years with 14.3% (52) respondents retained in employment. A

total of 34.8% (126) respondents have spent between 6 and 20 years of tenure at same institution.

The mean experience of the CDO, as reported in question #27 by the responding colleges (n = 251) by geographic location was between 9.1 and 12 years. The respondents single largest percentages, between 6% and 7%, were identified with development experience observed at the 1 (25), 10 (26) and 20 (24) year marks. The mean was 10.75 years with a range between .5 years and 33 years of experience. Eighty respondents (22.1%) had between 0 and 5 years, while 14.9% (54) of this group had between 0 and 3 years. Observations between 6 and 10 years resulted in 17.7% (64) of the respondents. A total of 40.6% (147) of chief development officers have between 6 and 20 years of development experience, with 6% (23) of the CDO respondents have more than 21 years of the profession.

The mean for the total grant revenue from all sources for the 362 respondents as reported in question # 34 was $4,145,035 and ranged from a minimum of $19,500 to $58,525,073. The revenue unadjusted means for all respondents by geographic locations were Rural $2,326,366, Urban $7,421,740, and Suburban $3,669,518 (see Table 3.1). In the regression model, the adjusted revenue means are a comparison among the listwise cases (n = 174) used in the multiple regression analysis.

The grants office operating budget was reported in survey question #33, and the calculations resulted in a mean for all 362 respondents of $151,943. Rural colleges reported the smallest mean of $82,530, with Urban at $241,054, and Suburban at $129,509 (see Table 3.1). The largest group had budgets under $100,000.

Summary

The population for this study was limited to the 968 American public two-year community colleges established as of 1998 that were members in the organizations of Council of Resource Development (CRD) or the American Association of Community Colleges (AACC). One survey instrument was mailed to the college president, a chief development officer, or another appropriate college individual at each of the 968 member community colleges. Responses were received from 380 (39.25%) colleges that represented a total of 45 states, 1 territory, and all 10 CRD regions. For this study, only colleges who were members in the CRD organization one or more years between 1998-2001 were selected as the sample population, resulting in 362 (95%) eligible participants who were included in the data analysis.

College size was determined by the unduplicated credit enrollment rather than full-time equivalent (FTE) due to variances in state FTE formulas (Meeker, 1995). The validated survey instrument was used to collect descriptive information about the college and the grants operation. Nine research hypotheses were developed to test the research questions. Descriptive statistics of mean, percentages, standard deviations, and frequencies were extruded from the data. A linear multiple regression analysis test conducted with SPSS 10.1 was used to test the research full model since the variables were continuous, and it was not known if one variable was more powerful than another.

CHAPTER 4
ANALYSIS OF DATA

Introduction

The purpose of this study was to identify model factors that indicate readiness for success to enable community colleges to engage in resource development activities. This study determined whether differences existed among the outcome variable of grant-generated revenue and the nine explanatory variables related to the college and grant office operation. The variables were selected for analysis after a relevant review of the literature and included the grant office operating budget, the chief development officer's years of experience and tenure, critical evaluation factors of meeting institutional goals and total dollars awarded, critical roles of the president and chief development officer, college size as measured in unduplicated credit head-count enrollment, and geographic location. The application of a systems theory allowed a holistic approach to the relations between the outcome variable of grant-generated revenue and the explanatory variables.

Data were collected by means of a survey mailed to 968 public, two-year community colleges that were members of the Council for Resource Development. (CRD) or American Association of Community Colleges (AACC). A total of 380 (39%) surveys were returned. For this study, only colleges in the U. S. and territories that were members one or more years between 1998-2001 in CRD were selected as the sample population, resulting in 362 (95%) usable surveys for this study.

Results

The descriptive statistics of the measures included in the analysis for the overall sample are shown in Table 4.1. The responses for the role of the President item were on a 4-point scale, and the average response of 3.138 of the ROLES-President suggests that the responses fell between the two values on the scale of "4-very critical" and "3-critical." The average response of 2.823 for the ROLES-Chief Development Officer indicates the responses fell below the value of "3-critical." The average responses of the other measures can be interpreted similarly. The average responses of 2.925 for the EVAL-Total Dollars Awarded suggests that on average the responses fell slightly below the value "3-important," whereas the response of 3.285 EVAL-Meeting Institutional Goals suggests that on average the responses fell below the midpoint between the scale values of "4-very important" and "3-important."

A multiple regression analysis was conducted to examine the degree of association between the outcome variable and the explanatory variables of grant operating budget, the chief development officer's years experience and tenure, critical evaluation factors of meeting institutional goals and total dollars awarded, critical roles of the president and chief development officer, college size as measured in unduplicated credit head-count enrollment, and geographic location. A 0.05 significance level was used. The R^2 of .391 was statistically significant, $F(10, 163) = 10.475$, $p<.001$; the explanatory variables are jointly associated with 39.1% of the revenue variance. The adjusted R^2 was .354.

Table 4.1

Descriptive Statistics of Explanatory and Outcome Variables

Variables	N	Mean	Standard Deviation
Revenue	289	4,145,035.294	6,469,775.672
Grants Operating Budget	208	151,943.361	490,777.209
ROLES-President	323	3.138	1.085
ROLES-Chief Development Officer	322	2.823	1.262
CDO-Years at institution	276	8.930	7.918
CDO-Years of experience	250	10.753	7.757
EVAL-Total dollars awarded	321	2.925	1.046
EVAL-Meeting institutional goals	321	3.285	1.153
Rural	361	--	--
Urban	361	--	--
Size by unduplicated head count	380	9,366.776	11,277.649
Valid N (listwise)	174		

The regression equation estimated model is as follows:

> Revenue = -5826440 (Constant) + .353 (Operating Budget) + 806252.73 (ROLES-president) + 261511.53 (ROLES-CDO) + 159110.41 (CDO-Years at institution) + 72160.138 (CDO-Years of experience) + 122485.39 (EVAL-Total dollars awarded) + (–9943.269) (EVAL-Meeting institutional goals) + 675190.99 (Location-Rural $X_{1)}$ OR + 2419508.3 (Location-Urban $X_{2)}$ + 254.263 (Size by unduplicated head count).

Table 4.2 reports the unstandardized regression coefficients (*b*), the standardized regression coefficients (*β*), the observed t-values, and the squared semi-partial correlations (r^2). Three of the nine variables were statistically significant at a 0.05 level: CDO-Years at institution (b = 159110.41, $t(163) = 2.885, p = .004$); Urban (b = 2419508.3, $t(163) = 2.207, p = .029$); Size by unduplicated head count (b = 254.263, $t(163) = 7.156, p = .000$).

The interpretation of the unstandardized regression coefficient (*b*) of any explanatory variables is a function of the scale of measurement of that variable. For example, one of the statistically significant explanatory variables was categorical, which affects the interpretation of the regression coefficient. For categorical variables that have been dummy coded (i.e., one level is coded 0 and the other coded 1) the regression coefficient represents the adjusted mean difference between the two levels of the dummy coded variable while controlling for the other explanatory variables. The two dummy coded variables X_1 (Rural) and X_2 (Urban) were coded "1." The category of Suburban was a reference variable for Rural and Urban locations. In other words, the regression coefficient for Urban, b= 2419508.3 indicates that those colleges who reported an Urban location gained $2,419,508 more dollars in Revenue than those who reported a Suburban location when controlling for the other explanatory variables.

For continuous variables the interpretation of the regression coefficient can be made in terms of rate and direction of change. The regression coefficient indicates the expected dollar change in the outcome variable Revenue for each dollar change in any one explanatory variable, while holding the other variables constant. For instance, the regression coefficient of 254.263 for Size by unduplicated head count suggests that each

student increase in this score results in an average $254.26 dollar increase in Revenue. Likewise, a regression coefficient of 159110.41 for CDO-Years at Institution suggests that each year of increase in this score leads to an average $159,110.41 dollar increase in Revenue.

Table 4.2

Unstandardized Regression Coefficients, Standardized Regression Coefficients, t-test Statistics, and Semi-Partial r-squares

Variables	*b*	Std Error	*ß*	*t*	*p*	r^2
Intercept (Constant)	-5826439.731	3979088.863		-1.464	.145	
Grants Operating Budget	.353	.859	.028	.411	.681	.001
ROLES-President	806252.728	626524.938	.082	1.287	.200	.010
ROLES-Chief Development Officer	261511.531	391374.309	.042	.668	.505	.003
CDO-Years at institution	159110.411	55152.637	.186	2.885	.004*	.048
CDO-Years of experience	72160.138	58937.863	.080	1.224	.223	.009
EVAL-Total dollars awarded	122485.387	680454.168	.011	.180	.857	.000
EVAL-Meeting institutional goals	-9943.269	832890.581	-.001	-.012	.990	.000
Rural	675190.989	1065434.533	.048	.634	.527	.003
Urban	2419508.322	1096528.027	.164	2.207	.029*	.029
Size by unduplicated head count	254.263	35.533	.489	7.156	.000*	.239

a Dependent Variable: REV34
* denotes significant variables

To determine the relative contribution of each explanatory variable, the squared semi-partial correlation was calculated for each one. The squared semi-partial correlation (r^2) represents the proportion of total variance (i.e., of the outcome variance) that is associated with any one explanatory variable over and above that of the others. Cohen (1988) stated that the magnitude of r^2 can be examined in terms of effect size where $r^2 = .0196$ is considered to be small, $r^2 = .13$ is considered to be medium, and $r^2 = .26$ is considered to be large. As shown in Table 4.2, according to Cohen's criterion, the effect sizes of all three statistically significant variables are classified as being either small or medium: Years at institution-CDO ($r^2 = .048$); Urban ($r^2 = .029$); and Unduplicated head count ($r^2 = .239$). Small effects (i.e., $.02 \geq r^2 > .13$) are often considered to be practically significant, whereas effects smaller than .02 are typically not considered to be practically significant. The effect sizes of the remaining variables are at .01 or lower, which are, at best, negligible in size. Four variables had unexpected negligible effect sizes: ROLES-President ($r^2 = .01$), ROLES-CDO ($r^2 = .003$), CDO-Years of experience ($r^2 = .009$), and EVAL-Meeting institutional goals ($r^2 = .000$).

Summary

The three explanatory variables of Urban location, Size by unduplicated head count, and the Chief Development Officer's Years at the Institution were found to be statistically significant in the multiple regression model with a significance level of 0.05. Effect sizes of the semi-partial correlations (r^2) from the three significant variables were classified as small or medium. Six variables were found not to have relationships with the outcome variable of Revenue, although the literature supports their importance. These variables had unexpected negligible effect sizes as explained by their squared semi-

partial correlations. The findings of these insignificant variables disagree with previous studies that focused on the relationships of these explanatory variables to the amount of grant revenue awarded.

The adjusted r-squared finding of $R^2 = .391$ suggest the model as a whole explains 39% of the revenue variance. The three significant explanatory variables of urban location, enrollment size, and tenure of the CDO were found to have a relationship with the outcome variable of revenue, thus the results can be generalized to the population.

CHAPTER 5
SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

The purpose of this study was to identify model factors that indicate readiness for success to enable community colleges to engage in resource development activities. This study determined whether differences existed among the outcome variable grant-generated revenue and explanatory variables related to the college and grant office operation when controlled for the other variables. The variables selected for analysis from a review of the relevant literature included the outcome variable of revenue and nine explanatory variables of grant office operating budget, the chief development officer's years of experience and tenure, critical evaluation factors of meeting institutional goals and total dollars awarded, critical roles of the president and chief development officer, college size as measured in unduplicated credit head-count enrollment, and geographic location. The application of a systems theory allowed a holistic approach to the relations between the outcome variable of grant-generated revenue and the explanatory variables.

The following research questions were raised:

1. What is the relation between grant revenue raised and the **grant office operating budget** when controlling for the other explanatory variables of interest in the proposed regression model?

2. What is the relation between grant revenue raised and the **critical role of the college president** when controlling for the other explanatory variables of interest in the proposed regression model?

3. What is the relation between grant revenue raised and the **critical role of the chief development officer** when controlling for the other explanatory variables of interest in the proposed regression model?

4. What is the relation between grant revenue raised and the **years of tenure of the chief development officer at the institution** when controlling for the other explanatory variables of interest in the proposed regression model?

5. What is the relation between grant revenue raised and the **years of experience of the chief development officer** when controlling for the other explanatory variables of interest in the proposed regression model?

6. What is the relation between grant revenue raised and the **evaluation factor of meeting institutional goals** when controlling for the other explanatory variables of interest in the proposed regression model?

7. What is the relation between grant revenue raised and the **evaluation factor of total dollars awarded** when controlling for the other explanatory variables of interest in the proposed regression model?

8. What is the relation between grant revenue raised and the **geographic location of the college** when controlling for the other explanatory variables of interest in the proposed regression model.

9. What is the relation between grant revenue raised and the **college size as unduplicated credit head count** when controlling for the other explanatory variables of interest in the proposed regression model?

Discussion of Findings

The findings from the full model multiple regression test resulted in three explanatory variables of Urban location, Size by unduplicated head count, and the Chief Development Officer's Years at the Institution being found statistically significant with a significance level set at 0.05. The effect sizes indicated by the semi-partial correlations (r^2) were classified as small or medium using the Cohen (1988) classification. The effect size indicates the three significant explanatory variables do influence the outcome variable of grant revenue.

The findings indicated a significant difference in the grant revenue of large sized colleges when compared to all other respondents (*b* = 254.263, *t*(163) = 7.156, *p* = 000). These findings suggest that for each new student the grant revenue can expect to increase by $254. A significant difference in the revenue of urban colleges (*b* = 2419508.3, *t*(163) = 2.207, *p* = .029) when compared to the geographic location of suburban. When geographic locations are compared, the urban setting can expect $2,419,508 more dollars of grant revenue than a college in a suburban location. Likewise, a rural college will only expect to gain $675,191 more in grant revenue than a suburban college.

This study's findings indicated a significant difference in the revenue of colleges that had long-term chief development officer (CDO) when compared to a CDO with shorter tenure at an institution (*b* = 159110.41, *t*(163) = 2.885, *p* = .004). The increased tenure of the CDO can be expected to influence positively the amount of grant revenue by $159,110 each year he remains at the institution. Thus, the combination of enrollment size, geographic location and CDO tenure influences the amount of revenue a college can be awarded through a grants operation. Furthermore, the identified relationships among the three significant variables and Revenue demonstrate a system theory can explain how a set of variables influences and effects the amount of grant revenue a college can attain.

The six remaining variables had unexpected negligible effect sizes when compared to the findings of previous studies found in the literature. As an example, the regression findings indicated a rural location (p = .527) was not significant to the efforts of generating grant revenue. However, the findings do not suggest that a rural location is detrimental to a grants effort; only the amount of revenue is not as high above the mean

when compared to a suburban college. A college in a rural location can expect an increase of $675,191 in revenue over the mean when compared to suburban revenue.

The adjusted r-squared finding of $R^2 = .391$ suggests the model as a whole explains 39% of the revenue variance. When the three significant explanatory variables were considered together, they were found to have a relationship with the outcome variable of Revenue. The findings of this national study are generalizable to the population as they indicate a statistically significant relationship with the amount of grants revenue awarded to a college and the three factors.

Conclusions

It is possible to conclude that revenue from resource development efforts within the community college grants office is a result of three factors: the enrollment size of the college, the geographic location of the college, and the chief development officer's tenure at the institution. This study's significant findings agree with previous studies' on the factors influencing grant-generated revenue.

Community colleges with significant enrollment are in a better ready position to be successful in procuring grant revenue. The mean for Size by unduplicated head count was 9,366, considered a large enrollment in the literature (Cohen & Brawer, 1996; Carnegie, 1994; Katsinas, 1993, 1996; NCES, 2001). This study's finding concurs with the relevant literature that equates institutional size as the most important variable regardless of topic (Cohen & Brawer, 1996; Pickett, 1977), since it affects the type and variety of opportunities in development initiatives (LeCroy, 1998; Maples, 1980). Further researchers have stated the institutional support for development increases with the size and complexity of the college (Kelly, 1998; Peterson, 1999; Robison, 1982; Ryan, 1989b; Worth, 1993).

This significant finding of Size in this study suggests a college with an enrollment of over the mean can expect an increase of $254 in grant revenue for every student enrolled.

Community college grant office operations that were geographically located in urban areas received the largest mean revenue than the reference category of suburban. The adjusted mean revenue was $4,346,094. Colleges that are located in urban areas (defined as a central city surrounded by a densely settled area of a population of 50,000 or more exceeding 1,000 people per square mile) have unique resources available to them from business, industry, and the community that impacts development success as well as unique socio-economic conditions not found in rural (places of less than 2,500) and suburban communities (populations of 2,500 outside of urbanized areas) (Clements, 1990; Department of Commerce, 2002; Duffy, 1982; Glass & Jackson, 1998a; LeCroy, 1998; Maples, 1980; "Rural," 1993). The geographic location findings of this study suggest a college located in an urban area can expect a revenue increase of $2,419,508 over the mean in the regression model.

Tenure of the chief development officer at an institution is a critical factor in the readiness of the college to seek grant revenue. Previous research supports this finding that high turnover negatively affects performance and limits effectiveness (Worth, 1993). The mean tenure of the CDO was 9 years, higher than the average tenure between 3 and 8 years as cited in the literature (Brumbach, 1991; Collins, 2002; Netherton, 2002; Schwinn & Sommerfeld, 2002). This finding suggests that for every year the chief development officer remains at the institution beyond the mean years, the grants revenue can be expected to increase by $159,110.

This study's findings differ from the 12 success variables identified by Young (1978) in his study of Florida's 28 community colleges and subsequent researchers (Kelly, 1998; Koelkebeck, 1994; Webb, 1982; Worth, 1993). These later studies included a chief development officer with many years of development experience as a success factor, but not necessarily as a person with long-term tenure at the same institution. However, these studies identified similar variables pertaining to strong presidential support and commitment, adequate office budgets, and meeting institutional goals, of which this study's findings found not significant and with negligible effect sizes.

Unexpected findings of insignificant differences for the remaining six variables must be noted. The semi-partial correlations for the evaluation variables of total dollars awarded ($r^2 = .000$), and meeting institutional goals ($r^2 = .000$); the variables for the critical roles of the president ($r^2 = .01$) and CDO ($r^2 = .003$); the grants office operating budget ($r^2 = .001$); and CDO years of experience ($r^2 = .01$) had negligible effect sizes indicated from the regression model. The findings of the chief development officer's years of experience in development ($b = 72160.138$, $t(163) = 1.224$, $p = .223$) indicated this variable was insignificant; however it has been suggested that experience in development coupled with institutional tenure can result in more grant revenue (Brumbach & Bumphus, 1993; Duffy, 1988; Koelkebeck, 1994; Webb, 1982; Worth, 1993).

The grants operating budget ($b = .353$, $t(163) = .411$, $p = .681$) was not significant in this regression model and had a negligible effect with a semi-partial coefficient of $r^2 = .001$. The multiple regression results indicate these variables disagree with the literature and are not influential in the grants revenue efforts. The insignificant findings and

negligible effect sizes may have resulted for a variety of reasons. Systems theory literature suggests that in a complex system, if changing a variable does not change the outcome, the inference may be not that the variable is unimportant, but the change requires at least two variables to be altered (Jervis, 1999). It might be considered that in a systems model the effect is a result of all subunits working together, each contributing to the whole (Brumbach & Bumphus, 1993; Cain, 1999; Clements, 1990; Ironfield, 1991; Jervis, 1999; Laszlo, 1996).

During this study the researcher discovered portions of the survey and analysis process that could be refined to result in more significance and effect strength. It is suggested several variations of the multiple regression test be used from which the best regression equation can be selected to improve the predictive characteristics. The use of nine variables in this study may have resulted in overfitting in the multiple regression test. It is recommended a full model still be examined as it allows the researcher to observe the relationships of each variable, with subsequent tests to determine a predictive model.

The observation of outliers in the data points of scatter plots indicated these were not typical of the rest of the data set. In this study, the outliers were not rejected since their cause could not be traced to errors in recording the observations or in setting up the test, general rules for rejecting outliers. It is suggested the outliers be identified and rejected to avoid the skewing of data results and to improve the predictive characteristics of the test.

It is believed the response rate and data would be improved by making changes to the survey instrument. The response rate could be improved by providing a self-

addressed, paid envelope for the reply, or by using a web-based data mining technique to capture the responses. The survey should be redesigned into a shorter instrument with similar response scales for ease of completing and data entry. The data results from the variables with four scale values may be affected by a range restriction, thus a larger scale is suggested to improve the variability.

The range of responses in the fiscal data suggested a misunderstanding by the respondent of the nature of the question and the extent of data to include in the response. Although several questions defined the content for the response, the wide range of fiscal data suggests the respondent did not fully understand the intent of the question. It is suggested more exact explanations be used in future surveys regarding the data requested.

Definitions for the geographic locations were not included in the survey instrument, thus the data submitted resulted from the self-identification by the respondent for the institution's geographic location. This self-identification may have resulted in the colleges not being consistent within each category or with the definition used by the researcher. It is suggested the survey instrument include adequate definitions for reference use by the respondent.

Implications for Practice

Wattenbarger (1982) stated the purpose for resource development was to utilize all the resources to accomplish and promote the college mission and programs by providing the additional financial means to create or expand programs not possible without external funds. Many factors must be present and integrated into the college structure for a system approach to resource development to work successfully (Blong & Bennett, 1991; Bornhoeft, 2002; Ironfield, 1991; Pray, 1981). A system is driven by the

behavior of the individual units, integrated and interdependent, but able to produce a complex and orderly environment (Clements, 1990; Jervis, 1999). When viewed as a living system, a community college works because of its interconnected, yet unique, set of subunits engaged in creating an orderly environment. The coordination of efforts between all areas of administration is crucial to an efficient system of communication, policy development and deployment, funds allocation and management, and recruitment efforts (Pray, 1981). It is a systems approach, which enables the resource development efforts to be successful and provide substantial grant revenues to enhance America's community colleges. Making development officers an integral part of the organization's mission can minimize complaints, unrealistic expectations, and uncooperative administrators (Schwinn & Sommerfeld, 2002).

This study applied a linear regression model to a nonlinear model of interactions to gain an understanding of how a set of variables might interact together to create an optimum environment to ready an institution for grant procurement. Jervis (1999) contended a linear operation cannot capture the happenings within a complex system because the impact of one variable depends on others, thus explaining why the results of certain actions are often unintended or fail. It is for this reason that the selected variables in this study were analyzed by a regression model in order to conclude whether relationship differences existed. Although a seemingly contrary application of a systems model (Jervis, 1999), the findings of this study indicated statistically significant interactions between variables in the regression model.

Systems theory and its interactions can be useful to the development professional to better understand and use the emergent properties, interconnections, and forces that

form and generate a college system. If a development professional is aware of the variables and forces within their college system, they can become a key agent to promote the college mission and its programs. A few system ideas from Jervis (1999) can be adapted and applied to the grants development operation:

- Since nothing is constant, results cannot be predicted from separate actions or from multiple elements examined in isolation. Consider the anticipated outcomes on as many factors and then expect them to change.
- While some behaviors seem harmful, in fact, they may strengthen the situation. Some colleges might perceive their geographic location as a weakness for grant success. Paradoxically, the unique interaction of strategies (location, community wealth, programs) may influence later changes, and produce powerful dynamics of change that cannot be labeled elements of cause and effect.
- Resource development professionals who understand the system concept will be able to set policy and establish procedures by the expected indirect effects of an action. They understand that the direct impact of change may be less important than the indirect effects, which may result in a totally different change than expected.
- Development professionals must be sensitive to the delayed effects and interactions and be ready for a very different long-term result.
- Development professionals must consider the order and timing of factors as they influence a change, since an important effect can create changes even after its been removed.
- Development officers may need to trace the results of an action and detect the operation of the system's dynamics, rather than use a fixed measure of success.

Besides understanding how a system works, successful development professionals must become more integrated and knowledgeable of their college system. Hodge (2002) suggested a development professional need not be a "lone wolf" even in a one-person office and suggested some practical actions to emerge from the isolation:

- Educate your supervisors, colleagues, board members, and volunteers on the grants process, ensuring there is a development system and process in place for interested persons to apply for grants.

- Keep supervisors informed so they have realistic expectations. Let others know what you are doing, what projects are in the works, the progress made, what barriers encountered, and what is needed to get the job done.

- Seek opportunities to work on non-grant projects to improve interpersonal relationships, to advocate the grants work, and to learn about the college system.

- Take advantage of professional development opportunities and become a great grants professional. Although others may not understand what you do, they will see your positive results and respect your judgment.

- Establish relationships with other grant professionals in the community and across the nation in order to learn and grow professionally.

The significant variables identified in this study examine the potential success of a development operation based on system conditions that ready the institution for procuring grants. Literature is scant from this perspective (Leslie, 1977; Koelkebeck, 1994; Robison, 1982), mostly identifying operational factors that measure the level of success after procurement (Degerstedt, 1982; Pickett, 1977; Ryan, 1989a;). Two of the significant variables of this study, college size and location, have been identified and discussed in the literature as key factors of success. However, the third significant variable of tenure of the chief development officer has not been thoroughly examined in previous studies.

Of growing concern among development professionals are the tenure issue and mobility of chief development officers. The findings from this study indicated the mean tenure at the current instituion was 9 years, similar to a 2002 CASE survey that concluded the mean tenure at an institution as 8 years (Collins, 2002; Netherton, 2002). A major issue of the "revolving door" dilemma goes beyond the direct costs of hiring and training to the cost impact resulting in potential lost revenue (Hodge, 2002; Schwinn & Sommerfeld, 2002). In order to counter this high turnover of development professionals especially in light of eminent retirements, administrators, foundations, and charity associations must

give more attention to this problem. Researchers must focus on more national studies to measure job tenure and on conference sessions to discuss related issues. College administrators must investigate methods to gain advice and information on how to retain talented development professionals, perhaps by making them an integral part of the organization's mission. Schwinn and Sommerfeld (2002) suggested the integration of development into the management system can minimize complaints, reduce unrealistic expectations, and soothe uncooperative administrators. It was found that the chief development officer was integral to institutional planning and must be part of the leadership (Duronio & Loessin, 1991a; Worth & Asp, 1994). The fact remains that losing a revenue-generating position is taking a hit in the potential revenue to the college. To ensure resource development success, administrators should ensure that no one leaves for just the money (Schwinn & Sommerfeld, 2002).

Although resource development functions seem to have the characteristics of a nonlinear system with jumps and starts, the ultimate behaviors may reveal little about the delayed effects of the changes. According to Jervis (1999), the system effects described earlier can hold true for the insignificant variables in this study. He concluded the apparent lack of a relationship actually disguises the powerful effects at work in the system; thus, it may not be possible to determine the true relations of a single variable when the outcome emerges from the interaction of several elements. This observation by Jervis may explain why variables supported by the relevant literature and identified as being highly significant did not reveal their significance in this study. Loessin and Duronio (1993) concluded from their quantitative study that institutional characteristics alone do not explain adequately why some institutions raise more money than other colleges that are similar. It may be true

that using a single moment instrument to measure readiness success of a complex system is misleading because it fails to capture the indirect effects as the system reacts to the other variable's behavior (Jervis, 1999).

This researcher highlights two of the insignificant variables of this study that resulted in unexpected findings from the regression model. The literature overwhelmingly supported the influence of the president and the fundraising experience of the chief development officer to success in highly funded colleges (Blong & Bennett, 1991; Brittingham & Pelluzzo, 1990; Clements, 1990; Degerstedt, 1982; Duffy,1988; Glandon, 1987; Gollatscheck & Holligsworth, 1979; Ironfield, 1991; Jenner, 1987; Keener, 1982; Pray, 1981; Robison, 1982; Worth, 1993). However, as suggested by the systems characteristics, the insignificant variables may be influential, yet the powerful effects disguised. Jervis (1999) contended it may not be possible to determine the relations of a single variable within a complex system since the interactions between variables can result in unequal impact, interdependent, and a reversal of effect size. If numbers fail to reveal significant relations, then other factors can be considered for success, such as the possibility some development officers are more capable or institutions provide resources that cannot be quantified (Loessin & Duronio, 1993).

Together, the three significant readiness variables identified from this study of college size, an urban location, and institutional tenure of the chief development officer explains 39% of the increased revenue above the revenue mean of suburban colleges in the regression model. The readiness of an institution to engage in resource development, successfully, was identified by Koelkebeck (1994) as a major factor of fundraising, although a clearly defined model for fundraising success has not emerged from previous

research (Loessin & Duronio, 1993). It can be concluded from this study that readiness to engage in grants development is having a sufficient enrollment, being located in an urban area, and having a chief development officer with enough tenure to know the college system and community.

As development professionals, presidents, and trustees review the survey data, they must consider that resource development expenditures are not simply administrative expenses but rather investments in one of the few revenue centers at a college (Boardman, 1993; Jackson & Glass, 2000; Leslie, 1969). Studying fundraising by comparing institutional characteristics and results does not fully explain why some colleges generate more grant revenue than others that are similar, as was found in this study. Institutions vary tremendously in their potential for development success but can use their strengths to forward the development efforts (Loessin & Duronio, 1993). In order to maximize this potential, it is incumbent upon college leaders to understand the resource development function, provide the core elements of support, and integrate the development professional into the management operation (Bornhoeft, 2002; Halvorson, 1988; Merisotis & Wolanin, 2000; Pray, 1981; Worth, 1993). Growing numbers of resource development professionals agree that having institutional priorities for development helps focus time and resources on the areas related to achieving the college mission. Fund-raising success is the result of many factors and a deliberate, sustained efforts to raise money (Boardman, 1993; Duronio & Loessin, 1991b). The future vitality of community college resource development must become an integrated function within the college system (Glass & Jackson, 1998a, 1998b; Keener, 1982).

Community college resource development efforts can yield increasing grant funding for the continued transformation of community colleges nationwide. The need for resource development continues to grow as declining state support for higher education continues, thus community college leaders must "make new friends in new places" (Roueche & Roueche, 2000, p. 22); perhaps it begins from within.

Recommendations for Further Research

The following items are recommended for further research.

1. Further study is recommended using a systems theory to examine external socio-economic variables identified and how they affect the procurement of grant revenue, especially during economic downturn cycles. There are studies that discuss external conditions but not using a systems theory base and multiple regression analysis. The application of external variables in a regression model may result in new findings that would increase the knowledge of the profession. A study of additional variables grounded in a systems theory should be conducted.

2. Further study is recommended regarding the relationship between the type of professional preparation obtained by the chief development officers in the community college and the amount of funding procured by the institution. This information was not gathered by the survey instrument directly, but alluded to in asking about the highest degree or type of certifications held by the chief officer. In the past ten years there has been an emphasis on resource development individuals to obtain occupational-specific training such as fundraising or grantsmanship certifications or through completion of resource development internships. Unlike other professional occupations, a clear cause

and effect has not been verified in the resource development area. Therefore, an extensive study should be conducted in that regard.

3. Further study is recommended on the spending and effectiveness of grant fundraising to determine the cost ratio of procuring external funding. Studies have concluded a revenue-generating function is worth the resources allocated to this operation, and a college must spend money to make money (Boardman, 1993). However, little is known about the true cost of doing business to conclude whether more resources will indeed produce more grant revenue. An extensive study would provide financial guidelines for chief development officers and college administrators to follow during their strategic planning processes.

4. Further study is recommended to identify more clearly the grant development concept, organizational structure, and lines of authority that would be the most efficient and effective for the community college environment. Grant development is new in the community college setting and like its fundraising foundation sister can be a hodge-podge of personnel titles, responsibilities, and activities borrowed from the university advancement model. An extensive study on the structures of effective community college grant offices should be conducted.

5. Further study is recommended on investigating the level of grant revenue received and the college structure of the institution. The survey inquired into the college structure but this factor was not full analyzed. College structures have been used in earlier studies (Katsinas, 1993, 1996; Phipps, et al, 2001) to categorize the size of institutions, but not as an indicator of fundraising success. Further research on the relationship between college structure and grant revenue should be conducted.

6. Further research is recommended to determine whether regional areas of CRD member colleges are more successful in grant development and revenue procurement. The respondents by state were categorized by their CRD region in this study to determine the national scope of the survey. Not enough information was designed into the survey to obtain comparisons between regions to determine grant procurement readiness. Further research to compare CRD regions and the grant revenue should be conducted.

7. Further study is recommended to determine whether a relationship exists between the institutional tenure of the chief development officer in the community college, gender and the salary ranges in the profession. Netherton (2002) noted only 3% (264) of the respondents were from an associate degree granting institution in the 2002 CASE survey. Since this study was not designed to measure this combination of variables, further research to compare these variables should be conducted.

The recommendations for further research into the grants development operation at the community college will continue to identify and clarify key elements of fundraising success, programmatic structure, and system operations which maximize the benefits of investing in the personnel and resources necessary for a grant development success. It is wise to remember that in a system nothing happens in isolation and that the whole is not greater than the sum of its parts. It takes every unique part working together to make a living system, sustainable.

APPENDIX A
LIST OF PANEL REVIEWERS

Persons Included In First Review Panel
March, 2000

Marilyn Appelson
Director of College Development & Foundation
Oakton Community College
Des Plaines, IL

William Atkins
Associate Dean for Academic Affairs
Nassau Community College
Garden City, NY

Mary Brumbach
Executive Director, Resource & Economic Development
Brookhaven College,
Farmers Branch, TX

David Canine
Vice President for Institutional Advancement
Richland College
Dallas, TX

Mike Gaudette
Director of College Advancement
Southwestern Oregon Community College
Coos Bay, Oregon

Dr. Perry Hammock
Director of Resource Development & Foundation
Ivy Tech State College
Indianapolis, IN

Elaine Ironfield
Vice President
The Clements Group
Salt Lake City, UT

Sonja Jackson
Grants Writer
Polk Community College
Winter Haven, FL

Karen Luke Jackson
Consultant
Hendersonville, NC

Susan Kelley
Vice President for Resource Development & Government Relations
Valencia Community College
Orlando, FL

Persons Included In The Second Review Panel
May, 2000

Marilyn Appelson
Director of College Development & Foundation
Oakton Community College
Des Plaines, IL

Steven Budd
Dean for Institutional Advancement
Greenfield Community College
Greenfield, MA

Joan Edwards
Vice President of Planning & Development
College of Southern Idaho
Twin falls, ID

Kathleen Guy
Executive Director, Foundation
Northwestern Michigan College
Traverse City, MI

Bob Kiser
Director of Resource Development
Elgin Community College
Elgin, IL

Ann Munz
Director of Grants Development
Pellissippi State Technical College
Knoxville, TN

Theresa Roffino
Dean, Planning & Development
Bill J. Priest Institute for Economic Development
Dallas, TX

Annee Tara
Director of Planning, Development & Public Relations
Central Maine Technical College
Auburn, ME

Doug Van Nostran
Director of Grants
William Rainey Harper College
Palatine, IL

APPENDIX B
COVER LETTERS AND EVALUATION FORMS FOR PANEL REVIEW

March 21, 2000

Dear Survey Review Content Expert,

Thank you for serving on the panel of reviewers for the Community College External Funding Survey. Our research team from the University of Florida is conducting this national survey with the Council for Resource Development and additional support from the Clements Group. The study results will provide much needed data on the status of resource development in community colleges and on success factors pertinent to community college external funding from grants, contracts, and private giving. These results will be useful to trustees, presidents, development officers, human resource personnel, and other decision makers who can positively influence external funding efforts and outcomes.

You were selected as a member of the review panel because of your expertise in community college resource development. Your cooperation in evaluating the first draft of the enclosed survey will greatly assist the research team in identifying potential survey problem areas such as ambiguous or difficult questions, irrelevant items, missing questions, terms that need clarification, or survey format.

After reviewing the survey, please complete the attached evaluation form. You may add comments directly on the email version of the survey draft. If returning the revised survey by email, please make your changes in a different color (blue or red), use the strikeout feature (~~delete~~), and add your comments at the end of the survey or on the evaluation form. If returning the survey by fax or regular mail, please write directly on the printed survey. List any terms that are used in the survey that you believe need a specific definition for a clear understanding in answering the survey questions.

The research team will use your comments to refine the survey prior to its review by the Council for Resource Development (CRD) Board in April and its national distribution in May. To keep to this timetable, it is very important that you return the completed evaluation form and survey draft by **March 28, 2000** to the research team, attention Barbara Keener, via email to bkeener@coe.ufl.edu or fax to 352-392-3664.

Again, thank you for your participation.

Sincerely,

Barbara Keener, Ed.D.
Graduate Faculty
Department of Educational Leadership,
Policy and Foundations
University of Florida

Sharon M. Carrier
Doctoral Graduate Student
University of Florida

Sherry J. Meaders
Doctoral Graduate Student
University of Florida

COMMUNITY COLLEGE EXTERNAL FUNDING SURVEY
Evaluation Form [March, 2000]

1. From the list below, please check the ONE person who should receive the survey mailing for distribution at the college.

_____ Chancellor	_____ Grants/Contracts Officer
_____ District President	_____ Foundation Officer
_____ Campus President	_____ Chief Business Officer
_____ Resource Development Officer	_____ Human Resource Officer

Comments:

2. Are the survey instructions clear?

_____ Yes _____ No – How could they be improved?

3. Are the survey questions understandable?

_____ Yes _____ No – List the item number of any unclear survey questions and state how they these questions could be improved:

4. Are the survey questions easy to answer?

_____ Yes _____ No – Identify questions/items that would be particularly difficult to answer and briefly explain why.

5. Will the information requested be difficult to access or calculate?

_____ Yes _____ No Identify which questions ask for information that would be difficult to access or calculate.

6. Is the format of the survey appropriate for the information being requested?

_____ Yes _____ No – Please comment on how the format could be improved.

7. Estimate the time needed to answer the complete survey. _____ Minutes

8. What additional questions or items would you include to accomplish the survey purpose?

9. What terms need to be defined or further clarified?

10. Will the answers to this survey result in the support of the survey's purpose?

_____ Yes _____ No – Please explain why.

Please make additional comments on the survey and return this form and survey by **March 28, 2000** to the attention of Barbara Keener, via email bkeener@coe.ufl.edu or by fax: (352) 392-3664.

Name: ____ Date: _________________

Thank you for serving as a Content Expert Survey Reviewer and for providing your critique of this important national survey. Your comments will assist the research team in validating this survey for the benefit of community college resource development.

May 3, 2000

Dear CRD Board Member and Guest Reviewer;

Thank you for serving on the panel of reviewers for the Community College External Funding Survey. Our research team from the University of Florida is conducting this national survey with support from the Council for Resource Development and the Clements Group and with the endorsement of the Association of Community College Trustees (ACCT). The study results will provide needed data on the status of resource development in community colleges. These results will be useful to trustees, presidents, development officers, human resource personnel, and other decision makers who can positively influence external funding efforts and outcomes.

You were selected as a member of the review panel because of your expertise in community college resource development. Your cooperation in evaluating the enclosed survey will greatly assist the research team in identifying potential survey problems such as ambiguous or difficult questions, irrelevant items, and terms needing clarification.

After reviewing the survey, please complete the attached evaluation form. You may add comments directly on the email version of the survey draft. If returning the revised survey by email, please make your changes in a different color (blue or red), use the strikeout feature (~~delete~~), and add your comments at the end of the survey or on the evaluation form. If returning the survey by fax or regular mail, please write directly on the printed survey.

The research team will use your comments to refine the survey prior to its national distribution in July. To keep to this timetable, it is very important that you return the completed evaluation form and survey draft by **May 15, 2000.** If you are sending your comments by email, please directly reply to the email address: crd@aacc.nchc.edu. If you are faxing your comments, please send them to the University of Florida, attention Barbara Keener, at fax number: 352-392-3664. If you have questions, please call Barb at 352-392-2391, ext. 275.

Again, thank you for your participation.

Sincerely,

Barbara Keener, Ed.D.
Graduate Faculty
Department of Educational Leadership,
Policy and Foundations
University of Florida

Perry Hammock, Ph.D.
Vice President, Research
Council for Resource Development
Ivy Tech State College

Sharon M. Carrier
Doctoral Graduate Student
University of Florida

Sherry J. Meaders
Doctoral Graduate Student
University of Florida

COMMUNITY COLLEGE EXTERNAL FUNDING SURVEY

Evaluation Form [May 2000]

1. Are the survey instructions clear?

   a. _____ Yes _____ No – How could they be improved?

2. Are the survey questions understandable?

   a. _____ Yes _____ No – Identify unclear survey questions and state how the questions could be improved.

3. Are the survey questions easy to answer?

   a. _____ Yes _____ No – Identify survey questions that would be particularly difficult to answer and briefly explain why.

4. What terms need to be defined or further clarified?

5. What questions/items should be deleted?

6. What questions/items should be added?

Please make additional comments on the survey.

Return this form and any additional survey comments by
May 15, 2000, to CRD at crd@aacc.nche.edu
or by fax to Barbara Keener at
fax number (352) 392-3664.

Name: ______________________________ Date: ______________

Thank you for serving as a Survey Reviewer and for providing your critique of this important national survey. Your comments will assist the research team in validating the survey for the benefit of community college resource development.

APPENDIX C
COMMUNITY COLLEGE EXTERNAL FUNDING SURVEY COVER LETTER

July 2000

Dear Resource Development Professional,

Thank you for participating in this important study being conducted by the Council for Resource Development, the Association of Community College Trustees, and the University of Florida College of Education, with additional support from the Clements Group. The study results will provide a more complete view of COMMUNITY COLLEGE resource development and a more accurate picture of contributions to COMMUNITY COLLEGES.

This survey is divided into three sections: College Profile, Grant Development, and Foundation/Private Gift Development. **The College Profile section should be completed by a designated college contact person who will oversee the distribution, completion, and return of the survey. Section II is designed to be answered by the person responsible for external grants. Section III is designed to be answered by the person responsible for the college foundation operation. If one person is responsible for both grants and foundation operations, that person should complete Sections II and III.**

Please answer the questions as accurately as possible. Note that all questions pertain to fiscal year 1998-99 (or the equivalent). It may be helpful to use an annual report or other financial summary as you respond to the survey. Please return the completed survey by **August 15, 2000**. The return address and fax number are provided below. The survey will be analyzed and a report prepared. If you wish to receive a copy of the report, please indicate this interest on the survey by checking the box at the end of Section I.

Thank you for your help in providing the information needed for this study.

Sincerely,

Barbara Keener, Ed.D.
Graduate Faculty
Department of Educational Leadership,
Policy and Foundations
University of Florida

Perry Hammock, CFRE
Research Project Liaison
Council for Resource Development

Sharon M. Carrier
Doctoral Graduate Student
University of Florida

Sherry J. Meaders
Doctoral Graduate Student
University of Florida

Please return all sections of the survey by AUGUST 15, 2000.
Mail to: Dr. Barbara Keener, University of Florida, College of Education, P.O. Box 117049, Gainesville, FL 32611-7049 or **fax to:** (352) 392-3664.

APPENDIX D

COMMUNITY COLLEGE EXTERNAL FUNDING SURVEY

COMMUNITY COLLEGE EXTERNAL FUNDING SURVEY

INTRODUCTION

The Council for Resource Development, the Association of Community College Trustees, and the University of Florida College of Education, with support from the Clements Group, are surveying the nation's 1,200 community colleges to provide current information about community college resource development. Your college's participation is critical to this project. The survey results will enhance the efforts of two-year colleges, build credibility with funders and donors, and provide a more accurate picture of the investments being made in community colleges.

INSTRUCTIONS

The survey is divided into three sections and may require up to three different respondents. (If one person is responsible for both grants and Foundation operations, that person should complete Sections II and III.)

- **Section I – College Profile**
  To be completed by a designated college contact person who will oversee the distribution, completion, and return of the survey
- **Section II – Grant Development**
  To be completed by the person responsible for the external grants
- **Section III – Foundation/Private Gift Development**
  To be completed by the person responsible for the Foundation operation

Please note that all monetary figures requested are based on the 1998-99 fiscal year (or the equivalent). For accuracy and ease in answering, it may be helpful to use an annual report or other financial summary as you respond to the survey.

If you have questions, please contact the research team at bkeener@coe.ufl.edu or phone 352-392-2391, ext. 275. Please return the survey by **AUGUST 15, 2000.**

Mail to Dr. Barbara Keener, University of Florida, College of Education, P.O. Box 117049, Gainesville, FL 32611-7049 or fax to 352-392-3664.

In keeping with university's informed consent process, we wish to make you aware of your rights and the conditions of this research study: Specifically, there is no risk to you as a participant in this study. Your participation is completely voluntary, and there is no penalty for not participating. It will take approximately fifty minutes to complete the entire survey. You do not have to answer any question you do not wish to answer, and you have the right to withdraw from the study at any time without consequences. Your identity will be kept confidential to the extent provided by law, and your individual or college name will not be associated with or used in any report of the survey results. There is no compensation from your participation in this study. The benefit to participating will be the knowledge you gain about your college as a result of answering the survey questions. If you have any questions about the research procedures, you may contact Dr. Barbara Keener at the University of Florida, College of Education, Norman Hall 200E, P.O. Box 117049, Gainesville, FL 32611-7049 (phone: 352-392-2391, ext. 275). Any questions or concerns about research participants' rights may be directed to the University of Florida Institutional Review Board office, Box 112250, University of Florida, Gainesville, FL 32611-2250 (phone: 352-392-0433).

COMMUNITY COLLEGE EXTERNAL FUNDING SURVEY

SECTION I. COLLEGE PROFILE

Section I (questions #1 - #23) is to be completed by the designated college contact person who will oversee the distribution, completion, and return of the survey.

Please base all responses on the 1998-99 fiscal year (or the equivalent).

1. **Institution:** ____________________

2. **Year college was established:** ____________________

3. **Address:** ____________________

4. **City:** ____________________ 5. **State:** __________ 6. **Zip:** __________

7. **Designated contact person for this survey:** ____________________

8. **Title:** ____________________

9. **Telephone:** ( ) ____________________ 10. **Fax:** ( ) ____________________

11. **Email:** ____________________

12. **Fall 1998 Credit Enrollment** (non-duplicated head count): _______

13. 13. **Full-Time Equivalent** (FTE): _______

14. **Total 1998-99 institutional OPERATING (and/or GENERAL FUND) Budget:** $ ____________________

15. **Identify the geographic setting of the institution:** a. ☐ Rural b. ☐ Urban c. ☐ Suburban

16. **The college structure represents a:**
   a. ☐ Multi-College District
   b. ☐ Multi-Campus District
   c. ☐ Single Community College Campus
   d. ☐ Other ____________________

17. **The contact person's association is with the:**
   a. ☐ Community College Central/District Office
   b. ☐ College in a Multi-College District
   c. ☐ Campus in a Multi-Campus District
   d. ☐ Single Community College Campus
   e. ☐ Other ____________________

18. **Is there a Chief Resource Development Officer (or person with similar responsibilities)?** Yes ___ No ___

19. **If "yes" for #18, to whom does this person report?**
   a. ☐ Chancellor
   b. ☐ District President
   c. ☐ Campus President
   d. ☐ Vice-President (please specify what area) ____________________
   e. ☐ Other ____________________

20. **Is there a GRANTS office?** Yes ____ No ____

21. **Is there a FOUNDATION/PRIVATE GIFT DEVELOPMENT office?** Yes ____ No ____

22. **Is the grants office <u>separate</u> from the foundation/private gift development office?** Yes __ No __ NA __

23. **Briefly describe the institution's RESOURCE DEVELOPMENT structure:** ____________________

Please return all sections of the survey by AUGUST 15, 2000.
Mail to: Dr. Barbara Keener, University of Florida, College of Education, P.O. Box 117049, Gainesville, FL 32611-7049 **or fax to:** (352) 392-3664.

☐ **Please send a copy of the survey report to the contact person listed above in #7.**

SECTION II. GRANT DEVELOPMENT

Section II (questions #24 - #39) is to be completed by the personprimarily responsible for external grant funding.

Please base all responses on the 1998-99 fiscal year (or the equivalent).

24. **The grant officer's association is with the:**
    a. ☐ Community College Central/District Office
    b. ☐ College in a Multi-College District
    c. ☐ Campus in a Multi-Campus District
    d. ☐ Single Community College Campus
    e. ☐ Other ________________________________

25. **If there is a grants office, what year was it established?** ____________ N/A ________

26. **How many persons are assigned to the grants operation?**

Professional:	a. Full Time ______	b. Part Time ______
Paraprofessional:	a. Full Time ______	b. Part Time ______
Clerical:	a. Full Time ______	b. Part Time ______
Office Volunteer: ________		

27. **Indicate the following information about the person primarily responsible for grants:**

Title	Full or Part Time	Years in Position	Years with Institution	Years in Development
____________	______	______	______	______

28. **What title did this person hold IMMEDIATELY PRIOR to the current position?** ____________

29. **Indicate by degree type the highest level of education completed by this person:**
    a. ☐ Doctorate b. ☐ Master's c. ☐ Bachelor's d. ☐ Other ____________

30. **Indicate applicable certifications held by this person:** ____________

31. **To whom does this person report within the college structure?** ____________

32. **Estimate the total percentage of grants operation time spent on any or all of these functions:** N/A ______

a. Consortia/Partnership Development	_____ %	h. Grant Proposal Writing	_____ %
b. Contract Development	_____ %	i. Private Fundraising	_____ %
c. Data Management	_____ %	j. Public Relations	_____ %
d. Fiscal Management	_____ %	k. Special Events	_____ %
e. Funding Research	_____ %	l. Strategic Planning	_____ %
f. Government Relations	_____ %	m. Workshops/Training	_____ %
g. Grants Management	_____ %	n. Other ____________	_____ %
		TOTAL =	100 %

33. **Total 1998-99 grants office OPERATING budget (include salary/benefits):** $ ____________

34. **List the total dollar 1998-99 revenue in grant funding from the following sources:**
    a. Federal Government $____________
    b. State Government $____________
    c. Local Government $____________
    d. Corporations $____________
    e. Foundations $____________
    f. Other ________ $____________

35. **For the largest grant received in 1998-99, specify the source:** ____________ **and the total dollar amount: $** ____________**; if multiple-year grant, indicate 1998-99 amount: $** ____________

36. **Indicate the importance of the following factors in EVALUATING the institution's grants operation:**

		Very Important	Not Important	Important	Not Applicable
a.	Expenditure per student	____	____	____	____
b.	Meeting institutional strategic goals	____	____	____	____
c.	Membership in professional organizations	____	____	____	____
d.	Number of new sources of funding	____	____	____	____
e.	Number of students served	____	____	____	____
f.	Percent of grant funds to institutional budget	____	____	____	____
g.	Percent of grant revenue increase prior year	____	____	____	____
h.	Percent of grants awarded	____	____	____	____
i.	Performance on awarded projects	____	____	____	____
j.	Total dollars awarded	____	____	____	____
k.	Total number of grants awarded	____	____	____	____
l.	Other ______________	____	____	____	____

37. **Has the grants operation adopted a <u>code of ethics</u> advocated by a professional organization?** Yes ___ No ___

38. **If "yes" for #37, indicate the code of ethics adopted:**
   a. ☐ Council for Resource Development
   b. ☐ Council for the Advancement and Support of Education
   c. ☐ National Society of Fund-raising Executives
   d. ☐ Other ______________________________

39. **How critical are the following roles in the institution's grants operation? Please rate each:**

		Very Critical	Critical	Not Critical	Not Applicable
a.	President	____	____	____	____
b.	College Trustee	____	____	____	____
c.	Chief Resource Development Officer	____	____	____	____
d.	Chief Academic Officer	____	____	____	____
e.	Chief Student Affairs Officer	____	____	____	____
f.	Chief Business Officer	____	____	____	____
g.	Grants Officer	____	____	____	____
h.	Grants Paraprofessional	____	____	____	____
i.	Foundation Director	____	____	____	____
j.	Faculty	____	____	____	____
k.	Consultant	____	____	____	____
l.	Student	____	____	____	____
m.	Consortia	____	____	____	____
n.	Volunteer	____	____	____	____
o.	Legal/Paralegal	____	____	____	____
p.	Other ______________	____	____	____	____

SECTION III. FOUNDATION/PRIVATE GIFT DEVELOPMENT
Section III (questions #40 - #60) is to be completed by the person primarily responsible for the foundation operation.
Please base all responses on the 1998-99 fiscal year (or the equivalent).

40. **The foundation officer's association is with the:**
   a. ☐ Community College Central/District Office
   b. ☐ College in a Multi-College District
   c. ☐ Campus in a Multi-Campus District
   d. ☐ Single Community College Campus
   e. ☐ Other ______________________________

41. **If there is a foundation office, what year was it established?** ______________ N/A ______

42. **How many persons are assigned to the foundation operation?**
   Professional: a. Full Time ______ b. Part Time ______
   Clerical: a. Full Time ______ b. Part Time ______
   Volunteer (other than board member): ______________

43. **Indicate the following information about the person primarily responsible for the foundation operation:**

Title	Full or Part Time	Years in Position	Years with Institution	Years in Development
______________	______	______	______	______

44. **What title did this person hold IMMEDIATELY PRIOR to the current position?** ______________

45. **Indicate by degree type the highest level of education completed by this person:**
   a. ☐ Doctorate b. ☐ Master's c. ☐ Bachelor's d. ☐ Other ______________

46. **Indicate applicable certifications held by this person:** ______________

47. **To whom does this person report within the college structure?** ______________

48. **Estimate the total percentage of foundation operation time spent on any or all of these functions:** N/A ____

a.	Alumni Relations/Activities	____ %	j.	Planned Giving	____ %
b.	Annual Fund	____ %	k.	Prospect Research	____ %
c.	Capital Campaign	____ %	l.	Public Relations	____ %
d.	Data Management	____ %	m.	Scholarship Programs	____ %
e.	Endowment Fund(s)	____ %	n.	Special Events	____ %
f.	Fiscal Management	____ %	o.	Strategic Planning	____ %
g.	Foundation Board Relations	____ %	p.	Workshops/Training	____ %
h.	Grants	____ %	q.	Other ______________	____ %
i.	Major Gifts	____ %		TOTAL =	100 %

49. **Total 1998-99 foundation OPERATING budget (include salary/benefits):** $ ______________

50. **Total 1998-99 ASSETS in the foundation (excluding the operating budget):** $ ______________

51. **Of the total ASSETS indicated in #50, what is the amount of ENDOWED funds?** $ ______________

52. **List the total 1998-99 earned INCOME from the following:**
   a. Endowed Interest/Investments $ ______________ c. Property Sale $ ________
   b. Property Rental $ ______________ d. Other ________ $ ________

53. **List the total contributions realized from the following SOURCES in 1998-99:**
   a. Individuals: received (Living) $ ______________ e. Foundations $ ________
   b. Individuals: received (Bequests) $ ______________ f. State Match $ ________
   c. Community/Civic Organizations $ ______________ g. Other _____ $ ________
   d. Corporations $ ______________

54. List the contributions generated by each of the following fund-raising METHODS in 1998-99:

a.	Annual Fund	$________
b.	Capital Campaign	$________
c.	Planned Gifts	$________
d.	State Match	$________
e.	Special Events	$________
f.	Other ________	$________

55. Current value of all deferred gifts pledged to the institution in 1998-99: $ ________

56. Specify board member contributions to the college in 1998-99:

	Number of Board Members	Percent Board Who Donated	Total
a. College Board of Trustees	________	________%	$________
b. Foundation Board	________	________%	$________

57. Indicate the importance of the following factors in EVALUATING the foundation operation:

	Very Important	Important	Not Important	Not Applicable
a. Increase in individual giving	____	____	____	____
b. Meeting institutional strategic goals	____	____	____	____
c. Membership in professional organizations	____	____	____	____
d. Number of new donors	____	____	____	____
e. Number of repeat donors	____	____	____	____
f. Number of scholarships awarded	____	____	____	____
g. Number of special events held	____	____	____	____
h. Percent revenue increase over prior year	____	____	____	____
i. Total dollars raised	____	____	____	____
j. Other ________	____	____	____	____

58. Has the foundation operation adopted a code of ethics advocated by a professional organization? Yes__ No__

59. If "yes" for #58, indicate the code of ethics adopted:

a. ☐ Council for Resource Development
b. ☐ Council for the Advancement and Support of Education
c. ☐ National Society of Fund-raising Executives
d. ☐ Other ________

60. How critical are the following roles in the institution's foundation operation? Please rate each:

	Very Critical	Critical	Not Critical	Not Applicable
a. President	____	____	____	____
b. College Trustee	____	____	____	____
c. Foundation Board Member	____	____	____	____
d. Chief Resource Development Officer	____	____	____	____
e. Chief Academic Officer	____	____	____	____
f. Chief Business Officer	____	____	____	____
g. Chief Student Affairs Officer	____	____	____	____
h. Grants Officer	____	____	____	____
i. Faculty	____	____	____	____
j. Student	____	____	____	____
k. Alumnus	____	____	____	____
l. Consultant	____	____	____	____
m. Consortia	____	____	____	____
n. Volunteer	____	____	____	____
o. Legal/Paralegal	____	____	____	____
p. Other ________	____	____	____	____

Thank you for participating in this important community college survey.

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BIOGRAPHICAL SKETCH

Sherry J. Meaders is employed at Brevard Community College as the district director of development. As director she supervisors the grants, contracts, and alumni association, and coordinates fundraising with the college foundation, direct support organizations, departments and clubs. Prior to assuming these responsibilities, she was a grants development officer at the college. She is active in the college community serving as a subcommittee chairman for the SACS self-study accreditation and as an advisory board member for several college programs and community organizations. Ms. Meaders received a college VIP award for her outstanding contributions and selected to participate in the Leadership Challenge program. She is a 2000 graduate of the National Institute for Leadership Development, is a certified examiner for the Excellence in Education Pacesetter Award; has presented extensively on resource development at national, state, and local conferences; and is graduate adjunct for grants and management courses.

Before transitioning to higher education, Ms. Meaders spent 25 years in the public school arena in Missouri, Iowa, and Florida, serving as a classroom teacher, district tech prep coordinator, district development specialist, and grants coordinator. Ms. Meaders received a gubernatorial appointment to the Board of Trustees at Northwest Missouri State University where she served from 1983-1991. She has a Bachelor of Arts degree in history from Pittsburg State University in Pittsburg, Kansas, and a Master of Science degree in adult education from Central Missouri State University in Warrensburg, Missouri.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

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